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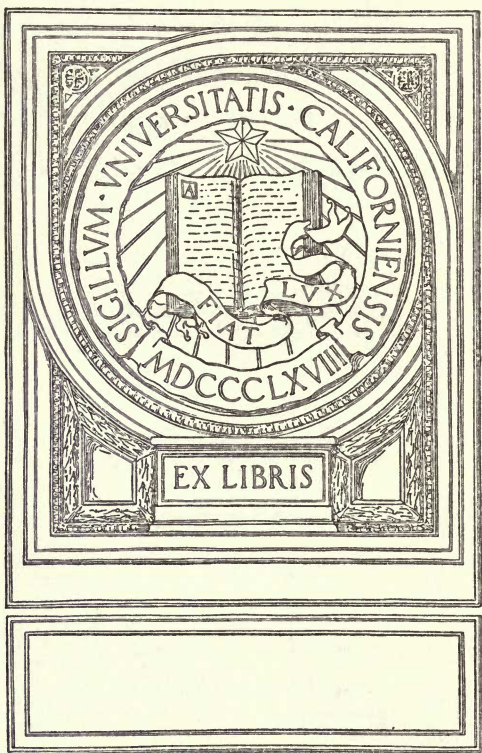
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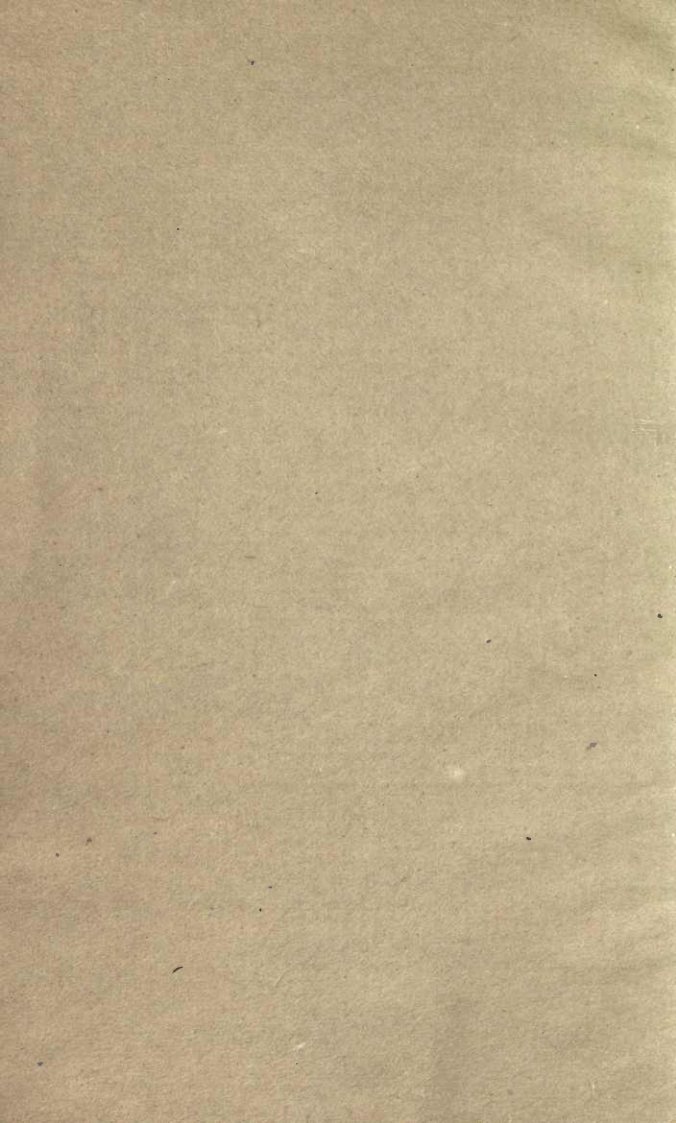
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UNITED STATES RAILROAD ADMINISTRATION
DIRECTOR GENERAL OF RAILROADS
CHICAGO AND NORTH WESTERN RAILROAD

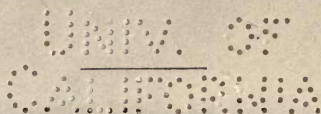
RULES
FOR THE GOVERNMENT
OF THE
OPERATING DEPARTMENT



leaving the service.



UNITED STATES RAILROAD ADMINISTRATION
DIRECTOR GENERAL OF RAILROADS
CHICAGO AND NORTH WESTERN RAILROAD



RULES

FOR THE GOVERNMENT

OF THE

OPERATING DEPARTMENT

TO TAKE EFFECT JUNE 1, 1919

ISSUED IN ACCORDANCE WITH THE STANDARD CODE
ADOPTED BY
THE AMERICAN RAILWAY ASSOCIATION
NOVEMBER 17, 1915.

TF 522

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1919

UNITED
STATES

RULES

FOR THE GOVERNMENT

CAMERON, AMBERG & CO. PRINTERS CHICAGO.



OPERATING DEPARTMENT

TO TAKE EFFECT JUNE 1, 1919

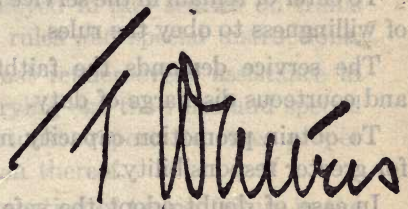
ISSUED IN ACCORDANCE WITH THE SEVEN-
DAY WORKING PLAN
THE AMERICAN RAILROAD
UNION

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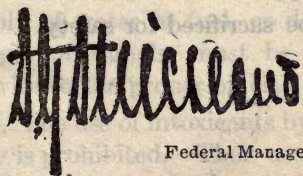
GENERAL RULES

The rules herein set forth govern the railroads operated by the Chicago & North Western Railroad. They take effect June 1, 1919, superseding all previous rules and instructions inconsistent therewith.

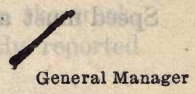
Special instructions may be issued by proper authority.



Approved:



Federal Manager


General Manager

M182703

GENERAL NOTICE

Safety is of the first importance in the discharge of duty.

Obedience to the rules is essential to safety.

To enter or remain in the service is an assurance of willingness to obey the rules.

The service demands the faithful, intelligent and courteous discharge of duty.

To obtain promotion capacity must be shown for greater responsibility.

In case of doubt adopt the safe course.

Speed must always be sacrificed for safety.

GENERAL RULES.

A. Employes whose duties are prescribed by these rules must provide themselves with a copy.

Employes whose duties are in any way affected by the time-table must have a copy of the current time-table with them while on duty.

B. Employes must be conversant with and obey the rules and special instructions. If in doubt as to their meaning they must apply to proper authority for an explanation.

C. Employes must pass the required examinations.

D. Persons employed in any service on trains are subject to the rules and special instructions.

E. Employes must render every assistance in their power in carrying out the rules and special instructions and must report to the proper official any violation thereof.

F. Accidents, detention of trains, failure in the supply of water or fuel, or defects in the track, bridges or signals, must be promptly reported by wire to the proper official.

G. The use of intoxicants by employes while on duty is prohibited. Their use, or the frequenting of places where they are sold, is sufficient cause for dismissal.

H. The use of tobacco by employes while on duty in or about passenger stations, or on passenger cars, is prohibited.

J. Employees on duty must wear the prescribed badge and uniform and be neat in appearance.

K. Employees and others authorized to transact business at stations or on or about trains must be orderly and avoid annoyance to patrons.

L. In case of danger to the Company's property employees must unite to protect it.

M. Every employe must keep the premises subject to his control neat and cleanly, and must take every precaution to guard against loss or damage by fire.

N. Minors must not be employed without proper release from parents or guardians.

O. The assignment of wages is prohibited. The attaching of an employe's wages by garnishment process, due to the employe's fault, or proceedings in aid of executions, will be considered sufficient cause for dismissal.

DEFINITIONS.

ENGINE.—A locomotive propelled by any form of energy.

MOTOR.—A car propelled by any form of energy.

TRACK CAR.—Any car which may be moved manually off or on track and may be a push car, speeder car, hand car, gang car, or motor car.

TRAIN.—An engine, or motor, or more than one engine, or motor, coupled, with or without cars, displaying markers.

REGULAR TRAIN.—A train authorized by a time-table schedule.

SECTION.—One of two or more trains running on the same schedule displaying signals or for which signals are displayed.

EXTRA TRAIN.—A train not authorized by a time-table schedule. It may be designated as—

Extra—for any extra train, except work extra;

Work extra—for work train extra.

SUPERIOR TRAIN.—A train having precedence over another train.

TRAIN OF SUPERIOR RIGHT.—A train given precedence by train order.

TRAIN OF SUPERIOR CLASS.—A train given precedence by time-table.

TRAIN OF SUPERIOR DIRECTION.—A train given precedence in the direction specified by time-table as between opposing trains of the same class.

TIME-TABLE.—The authority for the movement of regular trains subject to the rules. It contains the classified schedules of trains with special instructions relating thereto.

SCHEDULE.—That part of a time-table which prescribes class, direction, number and movement for a regular train.

DIVISION.—That portion of a railroad assigned to the supervision of a superintendent.

SUBDIVISION.—A portion of a division designated by time-table.

MAIN TRACK.—A track extending through yards and between stations, upon which trains are operated by time-table or train order, or both, or the use of which is governed by block signals.

SINGLE TRACK.—A main track upon which trains are operated in both directions.

DOUBLE TRACK.—Two main tracks, upon one of which the current of traffic is in a specified direction, and upon the other in the opposite direction.

THREE OR MORE TRACKS.—Three or more main tracks, upon any of which the current of traffic may be in either specified direction.

CURRENT OF TRAFFIC.—The movement of trains on a main track, in one direction, specified by the rules.

STATION.—A place designated on the time-table by name, at which a train may stop for traffic; or to enter or leave the main track; or from which fixed signals are operated.

SIDING.—A track auxiliary to the main track for meeting or passing trains.

FIXED SIGNAL.—A signal of fixed location indicating a condition affecting the movement of a train.*

YARD.—A system of tracks within defined limits provided for the making up of trains, storing of cars and other purposes, over which movements not authorized by time-table, or by train order, may be made, subject to prescribed signals and rules, or special instructions.

YARD ENGINE.—An engine assigned to yard service and working within yard limits.

PILOT.—An employe assigned to a train when the engineman or conductor, or both, are not fully acquainted with the physical characteristics or rules of the railroad, or portion of the railroad, over which the train is to be moved.

TRAIN REGISTER.—A book or form which may be used at designated stations for registering signals displayed, the time of arrival and departure of trains and such other information as may be prescribed.

* NOTE TO DEFINITION OF FIXED SIGNAL.—The definition of a "Fixed Signal" covers such signals as slow boards, stop boards, yard limits, switch, train order, block, interlocking, semaphore, disc, ball or other means for displaying indications that govern the movement of a train.

TRAIN RULES.

NOTE.—In the train rules for double track, those marked “D,” such as rule D-5, rule D-17, etc., either differ in language from the corresponding rule (rule 5, rule 17, etc.) of the rules for single track; or are rules used only for double track, as rule D-151, etc. Rules having simple numbers such as rule 1, rule 2, etc., are the same for both single and double track.

STANDARD TIME.

1. Standard time obtained from United States Observatory will be transmitted to all points from designated offices at ten o'clock a. m., central time, daily. Standard time.

2. Watches that have been examined and certified to by a designated inspector must be used by train dispatchers, road foremen of engines, enginemen, firemen, conductors, flagmen, brakemen, yard-masters, yard-engine foremen, and such employes as may be designated by special instructions. Watches required by.

The certificate in prescribed form must be renewed and filed with local watch-inspector every three months. Renewal of certificate.

2a. In addition to the quarterly examination of watches a weekly inspection by a local inspector is required. Weekly inspection.

(Form of Certificate.)

CERTIFICATE OF WATCH INSPECTOR.

This is to certify that on.....19....
the watch of.....
employed as.....
on the Chicago & North Western Railroad, was examined by me. It is correct and reliable, and, with proper care, should run within a variation of thirty seconds per week. Form of certificate.

Name of maker.....

Grade.....

Number of movement.....

Open or hunting case.....

Metal of case.....

Signed,

Inspector.

Address.....

compare time with their trainmen and engine-men with their firemen.

3b. Conductors, enginemen, yard-masters and yard-foremen who have not access to a standard clock will obtain correct time from the train dispatcher daily, before commencing their work.

Time from
Train Dis-
patcher.

TIME-TABLES.

Receipt for
time tables.

Employees concerned in the movement of trains must provide themselves with a copy of the current time-table and acknowledge receipt of same to the division superintendent through the several department heads, and through whom they will be furnished.

Expired
time tables.

All expired time-tables, after comparison with the new time-table, must be destroyed.

Check of
time tables.

It will be the duty of the chief train dispatcher to know that each conductor and engineer before commencing a trip, is provided with a copy of the current time-table.

New
time tables.

4. Each time-table, from the moment it takes effect, supersedes the preceding time-table, and its schedules take effect on any division, or subdivision, at the leaving time at their initial stations on such division, or subdivision. But when a schedule of the preceding time-table corresponds in number, class, day of leaving, direction, and initial and terminal stations with a schedule of the new time-table, a train authorized by the preceding time-table will retain its train orders and assume the schedule of the corresponding number of the new time-table.

Time tables
take effect.

Schedules on each division, or subdivision, date from their initial stations on such division, or subdivision.

Not more than one schedule of the same number and day shall be in effect on any division, or subdivision.

4a. The days on which trains are due to leave and arrive at their terminal stations on each sub-division are indicated by schedules. Days trains run.

4b. Special rules in a time-table expire with the time-table in which they are contained. Special rules.

5. Not more than two times are given for a train at any station; where one is given, it is, unless otherwise indicated, the leaving time; where two, they are the arriving and the leaving time. Times at stations.

The time applies to the switch where an inferior train enters the siding; where there is no siding it applies to the place from which fixed signals are operated; where there is neither siding nor fixed signal, it applies to the place where traffic is received or discharged. Where time applies.

Schedule meeting or passing stations are indicated by figures in **full-faced type**. Full-faced figures.

Both the arriving and leaving time of a train are in **full-faced type** when both are meeting or passing times, or when one or more trains are to meet or pass it between those times.

When trains are to be met or passed at a siding extending between two adjoining stations, the time at each end of the siding will be shown in full-faced type.

6. The following signs when placed before the figures of the schedule indicate: Schedule signs.

“s”—regular stop;

“f”—flag stop to receive or discharge passengers or freight;

“L”—leave;

“A”—arrive.

6a. When placed before the figures of the schedule the following will indicate:

"M"—meals.

"N"—luncheon.

.Other letters will indicate flag stops as specified by time table.

The following signs when placed elsewhere indicate:

"F" —fuel;

"W" —water.

"TT"—turn table;

"Y" —weye;

"CS"—communicating station.

SIGNALS.

Providing
signal ap-
pliances.

7. Employes whose duties may require them to give signals, must provide themselves with the proper appliances, keep them in good order and ready for immediate use.

Use of
signals.

✓ 7a. Employes giving signals must locate themselves so as to be plainly seen, and make them in such a manner as to be readily understood. The utmost care must be used to avoid taking a wrong signal and unless positive a signal is for them will not accept it until advised verbally. When signals from a trainman cannot be seen, train must be stopped immediately.

Flags and
lamps.

8. Flags of the prescribed color must be used by day, and lights of the prescribed color by night.

9. Day signals must be displayed from sunrise to sunset, but when day signals cannot be plainly seen, night signals must be used in addition. Signals displayed.

Night signals must be displayed from sunset to sunrise.

10. COLOR SIGNALS

COLOR	INDICATION
(a) Red.	Stop.
(b) { Green and red. Yellow.	Proceed with caution, and for other uses prescribed by the Rules.
(c) Green.	Proceed, and for other uses prescribed by the Rules.
(d) Green and white.	Flag stop. See Rule 28.
(e) Blue.	See Rule 26.

10g. A white light may be used in the marker on upper quadrant signals. Marker light.




10h. A caution signal placed near the track, indicates that trains must proceed at slow speed prepared to stop until a proceed signal is reached. On single track these signals will be placed to the right of the track, and on double track to the left of the track in the direction of current of traffic. Caution signals.


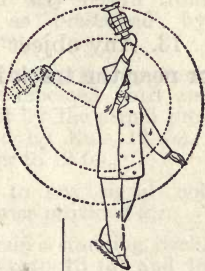

✓ 11. A train finding a fusee burning on or near its track must stop and extinguish the fusee, and then proceed with caution prepared to stop short of train or obstruction. Fusees.


✓ 11a. Passenger trains need not extinguish fusees.

12. HAND, FLAG AND LAMP SIGNALS

NOTE—The hand, or a flag, moved the same as the lamp, as illustrated in the following diagrams, gives the same indication.

MANNER OF USING	INDICATION	DIAGRAM
(a) Swung across the track.	} Stop.	
(b) Held horizontally at arm's length when the train is moving.	} Reduce Speed.	
(c) Raised and lowered vertically.	} Proceed.	

MANNER OF USING	INDICATION	DIAGRAM
(d) Swung vertically in a circle at half-arm's length across the track when the train is standing.	} Back.	
(e) Swung vertically in a circle at arm's length across the track when the train is running.	} Train has parted.	
(f) Swung horizontally above the head when the train is standing.	} Apply air brakes.	

MANNER OF USING	INDICATION	DIAGRAM
(g) Held at arm's length above the head when the train is standing.	Release air brakes	

13. Any object waved violently by any one on or near the track is a signal to stop.

14. ENGINE AND MOTOR WHISTLE SIGNALS.

NOTE.—The signals prescribed are illustrated by “o” for short sounds; “—” for longer sounds. The sound of the whistle should be distinct, with intensity and duration proportionate to the distance signal is to be conveyed.

SOUND	INDICATION
(a) o	Apply brakes. Stop.
(b) — —	Release brakes. Proceed.
(c) — o o o	Flagman protect rear of train.
(d) — — — —	Flagman may return from west, as prescribed by Rule 99.
(e) — — — — —	Flagman may return from east, as prescribed by Rule 99.
(f) — — —	When running, train parted; to be repeated until answered by the signal prescribed by Rule 12 (e). Answer to 12 (e).
(g) o o	Answer to any signal not otherwise provided for.
(h) o o o	When train is standing, back. Answer to 12 (d) and 16 (c). When train is running, answer to 16 (d).
(j) o o o o	Call for signals.
(k) — o o	To call the attention of yard engines, extra trains or trains of the same or inferior class or inferior right to signals displayed for a following section. If not answered by a train, the train displaying signals must stop and ascertain the cause.

SOUND	INDICATION
(l) — — o o	Approaching public crossings at grade and overhead, and curves where view is obscured.
(m) ———	Approaching stations, junctions, railroad crossings at grade, intermediate block stations and mail cranes.
(n) — — o	Approaching meeting points. See Rule 90.
(o) o —	Inspect train line for leak.
(p) Succession of short sounds.	Alarm for persons or live stock on the track.
D-14. (k) — o o	<i>To call the attention of yard engines or of trains moving in the same direction to signals displayed for a following section.</i> <i>If not answered by a train, the train displaying signals must stop and ascertain the cause.</i>

Duration
of whistle
sounds.

14q. The duration and interval between sounds must be as follows:

- (1) o Duration one second.
- (2) — Duration two seconds.
- (3) ——— Duration four seconds.
- (4) Interval between sounds one second.

Answering
signals.

14r. Should a train on single track or at end of double track fail to answer whistle signal 14 (k) as provided, the train displaying the signals will report the fact to the superintendent from the first communicating office.

✓ 15. The explosion of two torpedoes is a signal ^{Torpedoes.} to reduce speed and look out for a train ahead or obstruction. The explosion of one torpedo will indicate the same as two, but the use of two is required.

16. COMMUNICATING SIGNALS

NOTE.—The signals prescribed are illustrated by “o” for short sounds; “—” for longer sounds.

SOUND	INDICATION
(a) o o	When standing—start.
(b) o o	When running—stop at once.
(c) o o o	When standing—back the train.
(d) o o o	When running—stop at next passenger station.
(e) o o o o	When standing—apply or release air brakes.
(f) o o o o	When running—reduce speed.
(g) o o o o o	When standing—recall flagman.
(h) o o o o o	When running—increase speed.
(j) o o o o o o	When running—increase train heat.
(k) —————	When running—look back for hand signals.
(l) o o o o o o o	When approaching terminal—shut off steam heat.
(m) Continuous.	When running—brakes stick or wheels slide.

17. The headlight will be displayed to the ^{Headlight.} front of every train by night, but must be concealed when a train turns out to meet another and has stopped clear of main track, or is standing to meet trains at the end of double track or at junctions.

When an engine is running backward a white light must be displayed by night on the rear of the tender.

(See diagram.)

Obscured
headlight.

17a. When a train heads into a siding to clear the main track and for any reason its headlight cannot be seen by an opposing train, or when using an impaired or defective headlight, the movement must be protected by a flagman until the main track is clear.

Double track
headlight.

D-17. The headlight will be displayed to the front of every train by night, but must be concealed when a train is standing to meet trains at the end of double track or at junctions. When an engine is running backward a white light must be displayed by night on the rear of the tender.

(See diagram.)

Headlights
in yards.

18. Yard engines will display the headlight to the front and rear by night. When not provided with a headlight at the rear, a white light must be displayed. Yard engines will not display markers.

Markers.

19. The following signals will be displayed, one on each side of the rear of every train, as markers, to indicate the rear of the train: By day, marker lamps, not lighted on passenger trains, green flags on other trains: By night, green lights to the front and side and red lights to the rear; except when the train is clear of the main track, when green lights must be displayed to the front, side and rear.

✓ 19a. When a car is hauled behind a caboose Markers behind caboose. the required signals used as markers will be shown on the caboose and in addition, a green flag by day and a red light by night, will be displayed on the rear of the last car.

(See diagrams.)

19b. On arrival at terminals, signals used as Removing markers. markers must not be removed until the train has been delivered to the yard men, or placed clear of main track.

19c. Train indicators upon cabooses will show Train indicators. schedule number, thus: "NO. 119;" if sections "1-119," "2-119," or succeeding sections, and the last section "LS 119."

If an extra train, they will show the letter "X" and engine number, thus: "X1592."

When more than one engine on an extra train, the number of the leading engine only, will be shown.

D-19. The following signals will be displayed, one on each side of the rear of every train, as markers, to indicate the rear of the train: By day, marker lamps not lighted on passenger trains, green flags on other trains: By night, green lights to the front and side and red lights to the rear; except when the train is clear of the main track, when green lights must be displayed to the front, side and rear, and except when a train is turned out against the current of traffic, when green lights must be displayed to the front and side, a green light to the rear on the side next to the main track on which the current of traffic is in the direction the train is moving, and a red light to the rear on the opposite side. Double track markers.

(See diagrams.)

Classification signals, sections.

20. All sections, except the last, will display two green flags and in addition, two green lights by night, in the places provided for that purpose on the front of the engine.

(See diagrams.)

Classification signals, extras.

21. Extra trains will display two white flags and, in addition, two white lights by night, in the places provided for that purpose on the front of the engine.

(See diagrams.)

Double header classification signals.

✓ 22. When two or more engines are coupled, each engine shall display the signals as prescribed by Rules 20 and 21.

✓ 22a. When the leading engine is detached the signals on that engine must be removed at once.

When but one signal.

23. One flag or light displayed where in Rules 19, 20 and 21 two are prescribed will indicate the same as two; but the proper display of all train signals is required.

Transferring schedules.

23a. When the schedule of a train is to be transferred from one crew to another at an intermediate junction or station, or at a point not the usual place of making such transfer, the waiting crew must not display identification signals or markers until after the arrival of the train using the schedule.

Cars pushed by engine.

24. When cars are pushed by an engine, except when shifting or making up trains in yards, a white light must be displayed on the front of the leading car by night.

(See diagrams.)

25. Each car on a passenger train must be connected with the engine by a communicating signal appliance. Communicating signals.

26. A blue signal, displayed at one or both ends of an engine, car or train, indicates that workmen are under or about it; when thus protected it must not be coupled to or moved. Workmen will display the blue signals and the same workmen are alone authorized to remove them. Other cars must not be placed on the same track so as to intercept the view of the blue signals, without first notifying the workmen. Repairer's signal.

26a. When repair work is to be done under or about cars by trainmen, a flagman may take the place of the blue signal; Engineman and Fireman must be notified. Repairs by Trainmen.

Passenger train inspection made at intermediate terminals, where engines are changed, only exterior inspection will be done without the use of blue signals, but as soon as repairs are found necessary, and before being done, blue signals will be placed ahead of the train between the rails, and high enough to be seen by the engineman; blue signals will also be placed to the rear of the train between the rails. Passenger train inspection.

At engine changing terminals where inspection of passenger trains is made, the train must not be moved until released by inspector to conductor. Changing engines at terminals.

Freight train inspection will be made on arrival of trains and before they are switched. This will consist of ordinary running inspection Freight train inspection.

and light running repairs. The train must first be protected at both ends by blue signals, and must not be moved until released by the inspector.

In making inspection and light running repairs the blue signals must be placed one rail length, or not less than thirty (30) feet distant from each end of the train, and always inside of frog clearance of the track where protection is required.

Blue signals
on sidings.

All tracks regularly or temporarily assigned to repair of cars must be protected for such use by a blue signal placed at each end, and in addition the switches must be locked.

Blue signals.
how placed.

In placing blue signals on assigned tracks, they will be placed between the rails at the switch end of a spur track, and at each end of a double end track, and always inside of the frog clearance of the track where protection is required.

Protecting
repair
tracks.

When switches to tracks regularly or temporarily assigned to the repair of cars cannot be locked, or other positive protection secured without interfering with switching movements, a hand-operated derail should be installed.

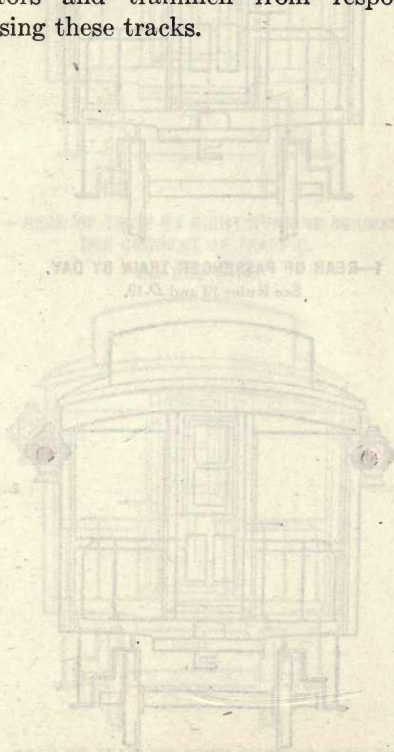
Standard
repair
signals.

The standard blue signal flag will be of metal, with forked end, mounted on a single standard and used at all points, except when men are sent to an intermediate station, a cloth flag may be used.

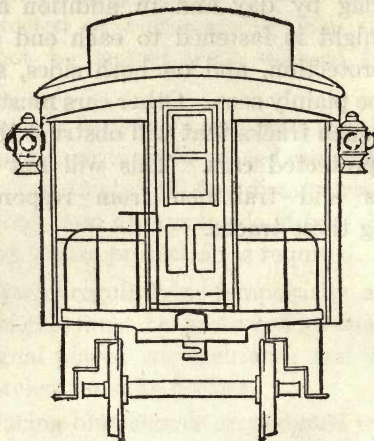
Protecting
work cars.

26b. When work or outfit cars are placed on a siding or passing track for so short a time that will not justify the cutting of the track, they will be protected as follows:

The man in charge of such cars will see that a white flag by day and in addition a white light by night is fastened to each end of cars needing protection, and on both sides, so that they can be plainly seen. Other cars must not be placed on such tracks that will obstruct the view of these protected cars. This will not relieve conductors and trainmen from responsibility when using these tracks.

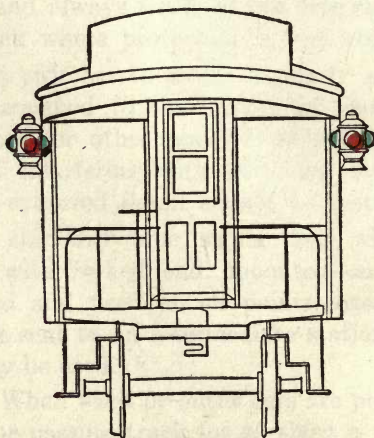


DIAGRAMS OF TRAIN SIGNALS



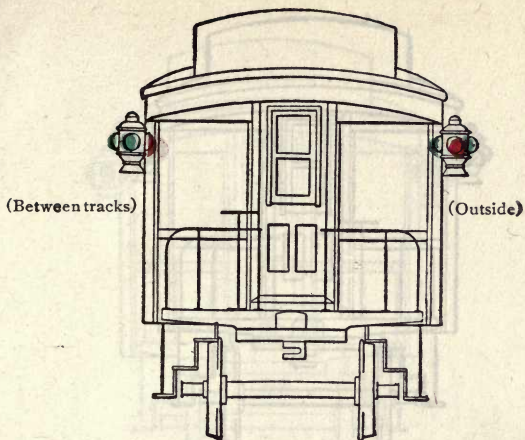
1—REAR OF PASSENGER TRAIN BY DAY.

See Rules 19 and *D-19*.



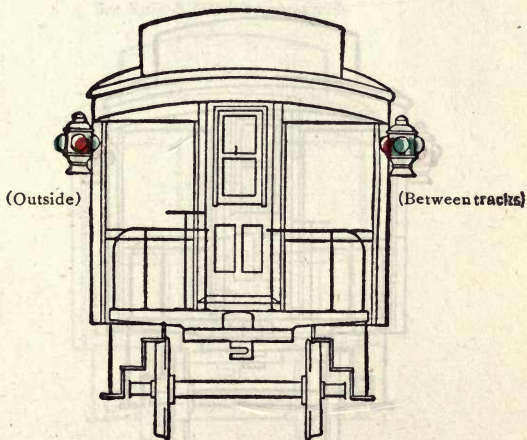
2—REAR OF TRAIN BY NIGHT WHILE RUNNING.

See Rules 19 and *D-19*.



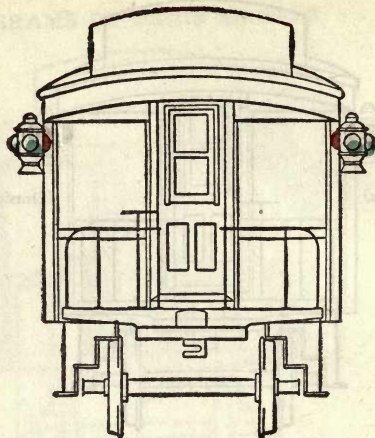
**3 — REAR OF TRAIN BY NIGHT RUNNING AGAINST
THE CURRENT OF TRAFFIC.**

See Rule *D-19*.



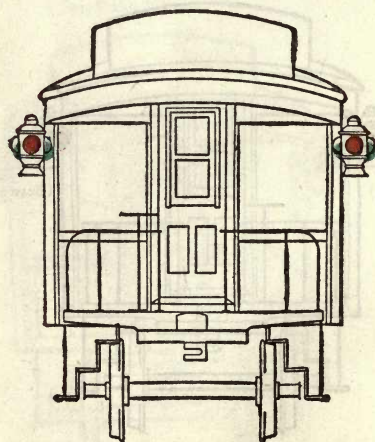
**4 — REAR OF TRAIN BY NIGHT RUNNING WITH THE
CURRENT OF TRAFFIC ON A LOCAL TRACK.**

See Rule *F-273*, second paragraph.



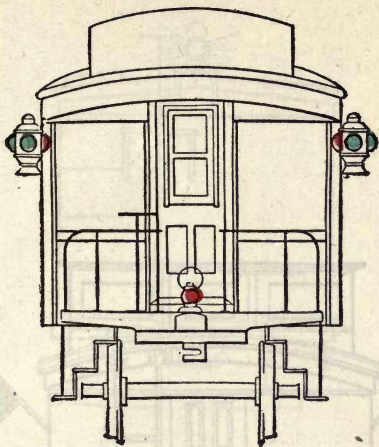
**5— REAR OF TRAIN BY NIGHT WHEN ON SIDING
TO BE PASSED BY ANOTHER TRAIN.**

See Rules 19 and *D-19*.



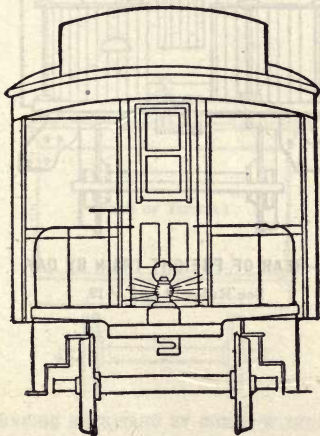
**6— REAR OF TRAIN BY NIGHT RUNNING WITH THE CURRENT
OF TRAFFIC ON AN EXPRESS TRACK.**

See Rule *F-273*, first paragraph.



**7— REAR OF TRAIN BY NIGHT RUNNING ON ANY TRACK
AGAINST THE CURRENT OF TRAFFIC.**

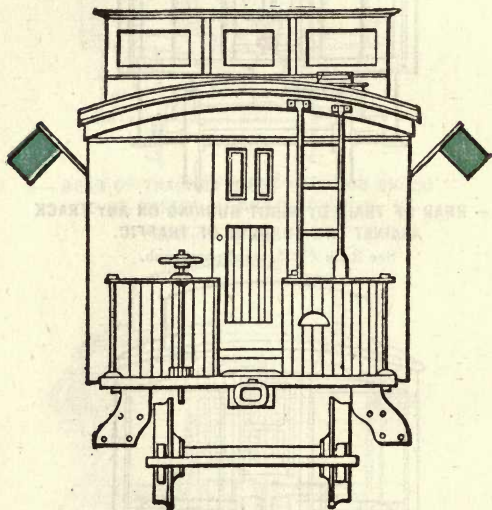
See Rule *F-273*, third paragraph.



**8— PASSENGER CARS BEING PUSHED BY AN ENGINE
BY NIGHT.**

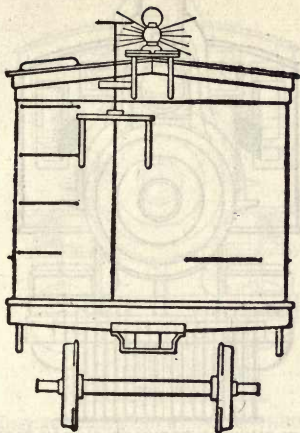
White light on front of leading car.

See Rule 24.



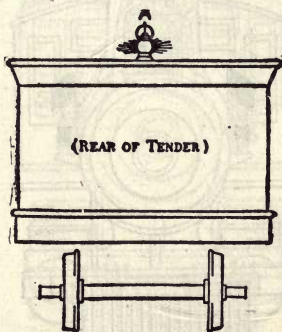
9—REAR OF FREIGHT TRAIN BY DAY.

See Rules 19 and *D-19*.



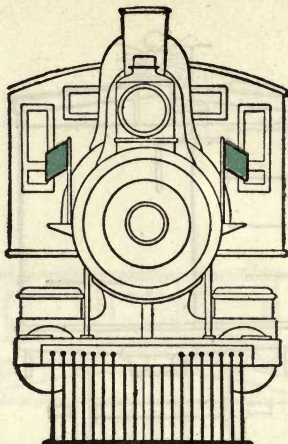
**10— FREIGHT CARS BEING PUSHED BY AN ENGINE
BY NIGHT.**

See Rule 24.



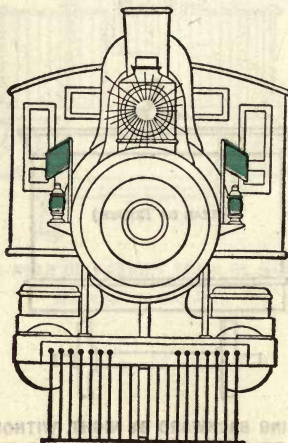
**11— ENGINE RUNNING BACKWARD BY NIGHT, WITHOUT CARS OR AT
THE FRONT OF A TRAIN PULLING CARS.**

See Rules 17 and D-17.



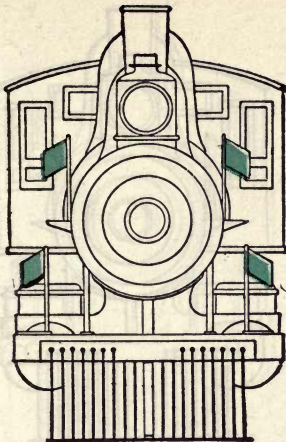
12— ENGINE RUNNING FORWARD BY DAY DISPLAYING SIGNALS FOR A FOLLOWING SECTION.

See Rule 20.



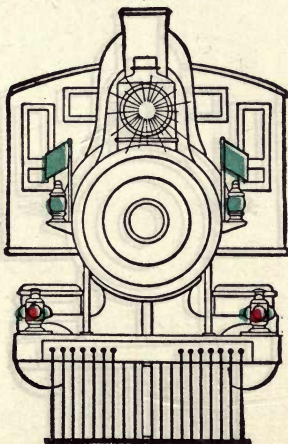
13— ENGINE RUNNING FORWARD BY NIGHT DISPLAYING SIGNALS FOR A FOLLOWING SECTION.

See Rule 20.



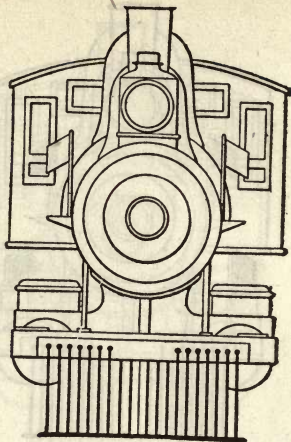
14— ENGINE RUNNING BACKWARD BY DAY, WITHOUT CARS OR AT THE REAR OF A TRAIN PUSHING CARS, AND DISPLAYING SIGNALS FOR A FOLLOWING SECTION.

See Rules 19, *D-19* and 20.



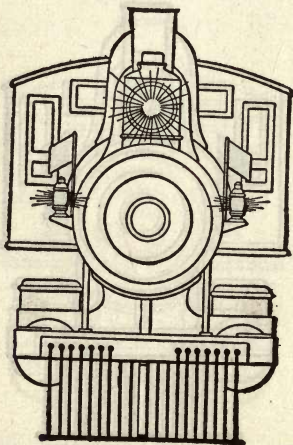
15— ENGINE RUNNING BACKWARD BY NIGHT, WITHOUT CARS OR AT THE REAR OF A TRAIN PUSHING CARS, AND DISPLAYING SIGNALS FOR A FOLLOWING SECTION.

See Rules 19, *D-19* and 20.



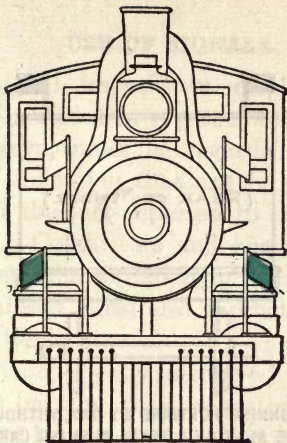
16—ENGINE RUNNING FORWARD BY DAY AS AN EXTRA TRAIN.

See Rule 21.



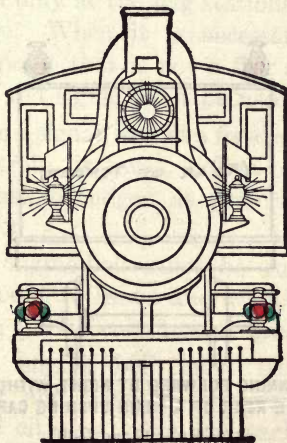
17—ENGINE RUNNING FORWARD BY NIGHT AS AN EXTRA TRAIN.

See Rule 21.



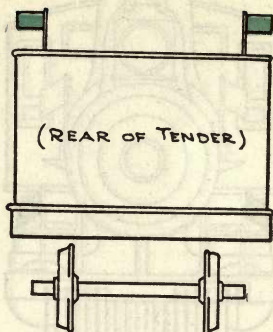
**18— ENGINE RUNNING BACKWARD BY DAY AS AN EXTRA TRAIN;
WITHOUT CARS OR AT THE REAR OF A TRAIN PUSHING CARS.**

See Rules 19, *D-19* and 21.



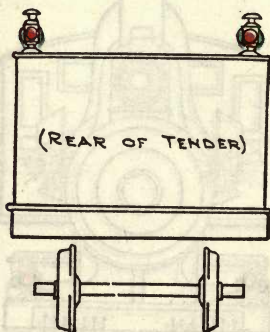
**19— ENGINE RUNNING BACKWARD BY NIGHT AS AN EXTRA TRAIN,
WITHOUT CARS OR AT THE REAR OF A TRAIN PUSHING CARS.**

See Rules 19, *D-19* and 21.



20— ENGINE RUNNING FORWARD BY DAY, WITHOUT CARS OR AT THE REAR OF A TRAIN PUSHING CARS.

See Rules 19 and D-19.



21— ENGINE RUNNING FORWARD BY NIGHT, WITHOUT CARS OR AT THE REAR OF A TRAIN PUSHING CARS.

See Rules 19 and D-19.

USE OF SIGNALS.

27. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as the most restrictive indication that can be given by that signal, and the fact reported to the chief train dispatcher. Conductors and enginemen using a switch where the switch light is imperfectly displayed or absent, must also, if practicable, correct or replace the light.

Signals im-
perfectly
displayed.

27a. An imperfectly displayed signal due to a lamp not burning, may be restored to normal condition by train or enginemen relighting the lamp.

Imperfectly
displayed
signals.

28. A green and white signal will be used to stop a train only at the flag stations indicated on its schedule. When it is necessary to stop a train at a point that is not a flag station on its schedule, a red signal must be used.

Flag stop
signals.

29. When a signal, except a fixed signal, is given to stop a train, it must, unless otherwise provided, be acknowledged as prescribed by Rule 14 (g) or (h.)

Answering
signals.

30. The engine bell must be rung when an engine is about to move and while approaching and passing public crossings at grade.

Engine bell
to be rung.

30a. The engine bell must be rung upon approaching and passing through all stations, villages and cities; also on approaching tunnels.

30b. The engine bell must not be rung on elevated tracks, except when approaching and leaving stations and in switching movements.

Bell not
rung.

Whistle
sounded.

31. The whistle must be sounded at all places where required by rule or by law.

Whistle
not sounded.

31a. The whistle must not be sounded while passing a passenger train, or on elevated track, except to prevent accident.

Unnecessary
use of
signal.

32. The unnecessary use of either the whistle or the bell is prohibited.

Crossing
watchmen's
signals.

33. Watchmen stationed at highway crossings must use stop signals when necessary to stop trains. They will use, by day a disk with the word "STOP" on its face; and by night a red light, visible only from a highway as signals to stop highway traffic.

Crossing
gate signals.

33a. Red signals will be used on all public crossing gates.

Watchmen
providing
signals.

33b. Watchmen must provide themselves with the required signal equipments for protecting highway traffic over tracks and comply with the special rules governing their duties.

Enginemen
communicate
signals.

34. The engineman and fireman must, when practicable, communicate to each other by its name the indication of all signals affecting the movement of their train.

Flagmen's
signals.

35. The following signals will be used by flagmen:

Day signals—A red flag,
Torpedoes and
Fusees.

Night signals—A red light,
A white light,
Torpedoes and
Fusees.

SUPERIORITY OF TRAINS.

71. A train is superior to another train by right, class or direction.

Right is conferred by train order; class and direction by time-table.

Right is superior to class or direction.

Direction is superior as between trains of the same class.

72. Trains of the first class are superior to those of the second; trains of the second class are superior to those of the third; and so on.

Trains in the direction specified by the time-table are superior to trains of the same class in the opposite direction.

73. Extra trains are inferior to regular trains.

MOVEMENT OF TRAINS.

82. Time-table schedules, unless fulfilled, are in effect for twelve hours after their time at each station. Schedules expire.

Regular trains more than twelve hours behind either their schedule arriving or leaving time at any station lose both right and schedule, and can thereafter proceed only as authorized by train order.

~~83.~~ 83. A train must not leave its initial station on any division, or subdivision, or a junction, or pass from double to single track, until it has been Leaving terminals.

ascertained whether all trains due, which are superior, or of the same class, have arrived or left.

Stations at which train registers are located will be designated by time-table.

Clearance
at term-
inals.

✓ 83a. A train must not leave its initial station, or junction point specified by time-tables where no governing train order signal is provided, without a Clearance Card. (Form A or A-1.)

Detouring
trains.

~~✗~~ 83b. When a train is detoured over another railroad, it must be governed by Rule 83 on regaining its proper subdivision and before assuming its schedule, report for orders to the train dispatcher, and obtain Clearance Card. (Form A.)

Train
registering.

83c. Conductors, before leaving a train register station, and on arriving at the terminal train register station must, unless otherwise provided, enter thereon all information required by the form. They must also examine this train register at such stations and obtain information required by Rule 83, furnishing copy of same to engine-man on blank Form 1015. Enginemen must receive and examine this register check before leaving train register stations. Where trains start from other than register stations, this information will be given in train order form by the train dispatcher.

Bulletins.

83d. Bulletins will be posted on boards provided for the purpose; those for conductors and enginemen will be located as shown on time-tables, and for yardmen will be located in yards where yardmen are employed.

Conductors and enginemen must consult bulletins before departing, and yardmen before commencing the day's work, and will be held accountable for all bulletins posted. Bulletins affecting the safety of trains, when sent to trains between terminal points, will be in 31 form of train order.

Consulting
bulletin
boards.

D-83. A train must not leave its initial station on any division, or subdivision, or a junction, until it has been ascertained whether all superior trains due have left.

Leaving
terminals.

Stations at which train registers are located may be designated by time-table.

84. A train must not start until the proper signal is given.

Signal
to start.

85. When a train of one schedule is on the time of another schedule of the same class in the same direction, it will proceed on its own schedule.

Schedule on
time of
another.

Trains of one schedule may pass trains of another schedule of the same class, and extra trains may pass and run ahead of 2d and 3d class trains and extra trains.

Trains pass
another.

A section may pass and run ahead of another section of the same schedule, first exchanging train orders, signals and numbers with the section to be passed. The change in sections must be reported from the next available point of communication.

Sections
pass
another.

D-85. When a train of one schedule is on the time of another schedule of the same class it will proceed on its own schedule.

Schedule on
time of
another.

Trains of one schedule may pass trains of another schedule of the same class, and extra trains may pass and run ahead of 2d and 3d class trains and extra trains.

Trains pass
another.

Sections
change.

A section may pass and run ahead of another section of the same schedule, first exchanging train orders, signals and numbers with the section to be passed. The change in sections must be reported from the next available point of communication.

Inferior
trains clear
following
train.

86. Unless otherwise provided, an inferior train must clear the time of a superior train, in the same direction, not less than five minutes; but must be clear at the time a first-class train, in the same direction, is due to leave the next station in the rear where time is shown.

Inferior
trains clear
opposing
trains.

87. An inferior train must keep out of the way of opposing superior trains and failing to clear the main track by the time required by rule must be protected as prescribed by Rule 99.

Extras clear
schedule
trains.

Extra trains must clear the time of opposing regular trains not less than five minutes unless otherwise provided, and will be governed by train orders with respect to opposing extra trains.

Meeting
points, same
class.

88. At meeting points between trains of the same class, the inferior train must clear the main track before the leaving time of the superior train.

Meeting
points, infe-
rior class.

At meeting points between extra trains, the train in the inferior time-table direction must take the siding unless otherwise provided.

Side
tracking.

Trains must pull into the siding when practicable; if necessary to back in, the train must first be protected as prescribed by Rule 99, unless otherwise provided.

Side track-
ing by class.

✓ 89. At meeting points between trains of different classes the inferior train must take the siding and clear the superior train at least five

minutes, and must pull into the siding when practicable. If necessary to back in, the train must first be protected as prescribed by Rule 99 unless otherwise provided.

✓ 90. Trains must stop at schedule meeting points, if the train to be met is of the same class unless the switch is right and the track clear. Stop at schedule meeting points.

When the expected train of the same class is not found at the schedule meeting point, the superior train must approach all sidings prepared to stop, until the expected train is met. Approaching meeting points.

Trains must stop clear of the switch used by the train to be met in going on the siding.

The engineman will give signal 14 (n) at least one mile before reaching a schedule meeting point with a train of the same or superior class, or a point where by train order the train is to meet or wait for an opposing train. Should the engineman fail to give signal 14 (n) as herein prescribed, the conductor must take immediate action to stop the train. Whistle signal meeting points.

90a. When trains meet or pass by special order or time-table schedule, conductors must inform each other verbally what trains they are, and enginemen must satisfy themselves as to their proper identity. Identifying trains met.

91. Unless some form of block signals is used, trains in the same direction must keep at least five minutes apart, except in closing up at stations. A train following a train carrying passengers must keep at least ten minutes behind it. Spacing trains.

Spacing
time in
time tables.

91a. The time space to be maintained between trains in the same direction will be regulated by special rule on each division time-table. This rule will not relieve trainmen from observing all rules in regard to the protection of their trains.

Clearances
in space
blocking.

✓ 91b. Freight trains must not pass an open train order station in districts where their movements are not controlled by automatic or manual block signals, except as provided by division time-tables, or special instructions, until the conductor and enginemen have received a Clearance Card (Form A) or (Form A-1) from the operator.

Passenger trains will observe the same rule at such train order stations as are regular stops for their train. This will not relieve operators from promptly displaying signal at Stop whenever they have orders, or making other necessary efforts to stop trains.

Clearance
when signal
is at stop.

A Clearance Card (Form A) properly filled out must be given in duplicate to the conductor and enginemen of a train when the train order signal is at Stop.

Clearance
when signal
is at proceed.

With the exceptions noted, a Clearance Card (Form A-1), properly filled out must be given in duplicate to the conductor and enginemen of all trains, when the train order signal is at Proceed, and no orders have been received for their train.

Schedule
arriving
time.

92. A train must not arrive at a station in advance of its schedule arriving time.

A train must not leave a station in advance of its schedule leaving time.

Schedule
leaving
time.

93. Within yard limits the main track may be used, protecting against first class trains.

Protecting
in yards.

Second and third class and extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear.

93a. Yard limits will be indicated by "yard limit" signs. Within these limits the main track may be used by yard engines against second and third class trains, protecting when view is obscured or during foggy or stormy weather; but the time of first-class trains must be cleared not less than five minutes.

Yard en-
gines pro-
tecting.

94. A train which overtakes another train so disabled that it cannot proceed will pass it, if practicable, and if necessary will assume the schedule and take the train orders of the disabled train, proceed to the next available point of communication, and there report to the chief train dispatcher. The disabled train will assume the right or schedule and take the train orders of the last train with which it has exchanged, and will, when able, proceed to and report from the next available point of communication.

Disabled
train.

When a train, unable to proceed against the right or schedule of an opposing train, is overtaken between communicating stations by an inferior train or a train of the same class having right or schedule which permits it to proceed, the delayed train may, after proper understanding with the following train, precede it to

Assuming a
schedule or
right.

the next available point of communication, where it must report to the chief train dispatcher. When opposing trains are met under these circumstances, it must be fully explained to them by the leading train that the expected train is following.

Combined
rights.

94a. Rule 94 must never be used as authority for trains to proceed under the combined rights or schedules of two trains.

Overtaking
disabled
train.

D-94 A train which overtakes a superior train, so disabled that it cannot proceed will pass it, if practicable, and if necessary will assume the schedule and take the train orders of the disabled train, proceed to the next available point of communication, and there report to the chief train dispatcher. The disabled train will assume the schedule and take the train orders of the last train with which it has exchanged, and will, when able, proceed to and report from the next available point of communication.

Running
in sections.

95. Two or more sections may be run on the same schedule.

Each section has equal time-table authority.

A train must not display signals for a following section, except as prescribed by Rule 85, without orders from the chief train dispatcher.

Not as sec-
tion of
passenger.

95a. Under no circumstances must a freight train or light engine run as a following section of a passenger train.

D-95. Two or more sections may be run on the same schedule.

Each section has equal time-table authority.

Running
in sections.

A train must not display signals for a following section, except as prescribed by Rule D-85, without orders from the chief train dispatcher.

96. When signals displayed for a section are taken down at any point before that section arrives, the conductor, if there be no other provision, will arrange in writing with the operator, or if there be no operator, with the switchtender, or in the absence of both, with a flagman left there for that purpose, to notify all opposing trains that the section for which signals were displayed has not arrived, and, in addition, the conductor must notify all opposing inferior trains, or trains of the same class, until the fact that the signals were carried has been registered at the next register station. Signals
taken down.

97. Extra trains must not be run without train orders. Running
extra.

97a. Work extras will be assigned working limits by train order.

Conductors must report by wire to the chief train dispatcher when their work is finished for the day, and state their working limits for the following day.

D-97. Unless otherwise provided, extra trains must not be run without train orders. Running
extra.

Work extras must move with the current of traffic unless otherwise directed.

D-97a. On portions of the road so specified on the time-table, or by special instructions, extra trains will run with the current of traffic without train orders.

98. Trains must approach the end of double track, junctions, railroad crossings at grade and drawbridges, with caution. Where required by rule or by law, trains must stop. Prepared
to stop.

Trains using a siding must proceed with caution, expecting to find it occupied by other trains.

Run with
caution.

98a. All freight and extra trains will approach and pass all stations, isolated sidings, water-tanks and coal-sheds with caution and under full control, expecting to find trains within the switches or taking coal or water. Trains occupying main track at stations will protect against superior trains in all cases, and will protect against all trains where the view is obscured, or when fog, storms, unusual stops, or other causes require additional safeguards.

Know fixed
signal indi-
cation.

98b. Enginemen must know the indication of all fixed signals before passing them. Approaching railroad crossings at grade, drawbridges, junctions, interlocking plants or train order offices, they will require the fireman to observe and communicate the indications of all signals.

Train
protection.

✓ 99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fuses.

When signal 14 (d), or 14 (e), has been given to the flagman and safety to the train will permit, he may return. When the conditions require he will leave the torpedoes and a lighted fusee.

The front of the train must be protected in the same way when necessary by the front brakeman or fireman.

When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection. By night, or by day when the view is obscured, lighted fusees must be thrown off at proper intervals.

When day signals cannot be plainly seen, owing to weather or other conditions, night signals must also be used.

Conductors and enginemen are responsible for the protection of their trains.

Flagman's signals:

Day signals—A red flag,
Torpedoes and
Fusees.

Night signals—A red light,
A white light,
Torpedoes and
Fusees.

✓ 99a. When a flagman goes back to protect a train at night, or in obscure weather, he will place a lighted fusee in the center of the track five hundred feet back of the rear of the train, and proceed back until proper distance is reached to insure full protection.

Placing
fusees and
torpedoes.

If a following train is in sight or hearing before the flagman has reached a point insuring full protection, he must at once place two torpedoes on the rail, and at night, or in obscure weather, or if the view is obscured, he will, in addition, display a lighted fusee and continue toward the approaching train, displaying stop signals until they are answered.

In placing torpedoes they will be securely fastened to the top of the rail on the engineman's side two hundred feet apart, and, when practicable, not closer than five hundred feet from a whistling post.

Sound
whistle when
reduce
speed.

99b. An engineman finding it necessary from any cause to reduce speed or stop at any unusual place, will sound the whistle signal 14 (c).

Moving
against
traffic.

99c. A train moving contrary to its normal direction without proper authority must be preceded by a flagman sent far enough in advance of the movement to insure absolute protection.

Trainmen
change
places.

100. When the flagman goes back to protect the rear of the train, the front brakeman or baggageman must, in the case of passenger trains, and the next brakeman, in the case of other trains, take his place on the train.

Protection
when condi-
tions inter-
fere at nor-
mal speed.

101. Trains must be fully protected against any known condition which interferes with their safe passage at normal speed.

When conditions are found which may interfere with the safe passage of trains at normal speed and no protection has been provided, such action must be taken as will insure safety.

Storms and
high water.

101a. When overtaken between stations by severe storms or indication of high water which threatens damage, trains will proceed with great caution, and under control, so that they can be stopped in time to prevent accident. Conductors and enginemen will examine bridges and culverts or other places subject to damage by high water

and if they find any indications of danger, will, on arrival at the first point of communication, notify the agent or operator, report by wire to the chief train dispatcher, and not proceed until instructions are received.

101b. Between December 1st and April 15th Spring rains. when low temperature prevails and at all times during heavy rainstorms or unusual track conditions, train and enginemen must use great care and speed of trains must be restricted so as to insure safety.

101c. Delayed fast passenger trains must not Zero weather. exceed their scheduled speed when temperature is near or below zero; local passenger trains scheduled at moderate rate of speed may make up delays incident to ordinary station stops. The scheduled speed of the fastest passenger train between any stations shall be the maximum speed of any train between such stations.

101d. When trains are running under slow Slow speed. speed orders or temporary slow speed signal, a man must be stationed on the last car and will give Proceed signal to the engineman after the last car has passed the limit where speed is restricted. Enginemen will maintain speed designated until the Proceed signal is given and will acknowledge it by whistle signal 14 (g).

101e. During stormy or foggy weather and Stormy and foggy weather signal indication. when signals cannot be plainly seen, enginemen and trainmen must be particularly alert; trains must move under such control as to insure stopping before passing a signal, the indication of

which is not known, and if the indication cannot then be seen the train will be governed in accordance with the most restrictive indication of that signal. Switching movements must not be made on main track except under Rule 99. Delays will be expected.

Foggy
and stormy
weather
crossing
protection.

101f. During foggy or stormy weather that obstructs the view, also when the view is otherwise obstructed, trains must pass through all stations at a greatly reduced speed and must sound the crossing whistle signal with sufficient frequency to protect all street crossings, whether protected by gates or otherwise, so as to avoid danger to vehicles or persons. One such whistle signal may be given for two or more crossings within a distance of 1000 feet from point of whistling.

Trains part
while in
motion.

102. If a train should part while in motion, trainmen must, if possible, prevent damage to the detached portions. The signals prescribed by Rules 12 (e) and 14 (f) must be given.

The detached portions must not be moved or passed until the front portion comes back.

Trains part
while in
motion.

D-102. If a train should part while in motion, trainmen must, if possible, prevent damage to the detached portions. The signals prescribed by Rules 12 (e) and 14 (f) must be given.

The detached portion must not be moved or passed until the front portion comes back.

The engineman and trainmen of the front portion must give the train-parted signal to trains running on the opposite track. A train receiving this signal or being otherwise notified that a train on the opposite track has parted, must immediately reduce speed and proceed with caution until the separated train is passed.

When a train is disabled so it may obstruct the opposite track, trains on that track must be stopped.

103. When cars are pushed by an engine, Cars pushed by engine. except when shifting or making up trains in yards, a trainman must take a conspicuous position on the front of the leading car.

X 103a. Trains or cars must not be pushed over Cars pushed by engine over crossing. street or public crossings, highways, electric or steam railway crossings at grade unless a member of the crew is on the leading car.

When the view of the trainman is obstructed and there are no gates or flagman, a member of the crew must be on the ground ahead to see that the crossing is clear, and that there is no one approaching.

No car containing passengers or employes must be switched unless coupled to the engine and air brakes in use.

✓ 103b. Except in suburban service engines Engine backing up. backing up with or without cars will not exceed 20 miles per hour on straight track and 15 miles per hour on curves.

When switch engines are run over the road Speed of switch engine. their speed must not exceed 15 miles per hour.

104. Switches must be left in proper position Position of switches. after having been used. Conductors are responsible for the position of the switches used by them and their trainmen, except where switchtenders are stationed, but when practicable, the engine-man must see that the switches nearest the engine are properly set.

A switch must not be left open for a following train unless in charge of a trainman of such train.

See Present Rule 104c.

Switch
nected
signal.

con-
with

104a. Before a switch which is protected by a mechanically connected signal is opened for a movement, the lever which controls the signal must first be placed so as to cause the signal to give its most restrictive indication.

After resetting the switch for main track the lever which controls the signal must be replaced in its normal position and locked.

Signals protecting switches do not relieve trainmen from protecting as prescribed by Rule 99.

Stand
away from
switches.

104b. Trainmen or other employes must not unlock nor stand within twenty feet of a main track switch on the approach or during the passing of any train, and when practicable will stand on the opposite side of the track from the switch lever.

Main track switches must be kept locked when not in use. Derailers, except while being used, must be kept in derailing position and locked, whether or not there are cars on the siding on which they are located.

Defective
switch.

104c. If a main track switch is defective, or has a defective lock, the switch must be secured and reported at once by wire to the superintendent.

Switch
targets.

104d. Main track switch targets will show edge of target and at night a green light when set for main track, or face of target and at night a red light when set for siding, or junction track.

105. Both the conductor and the engineman are responsible for the safety of the train and the observance of the rules, and, under conditions not provided for by the rules, must take every precaution for protection.

Responsible
for safety
of train.

106. Trains must use caution in passing a train receiving or discharging passengers at a station and, except where proper safeguards are provided or the movement is otherwise protected, must not pass between it and the platform at which the passengers are being received or discharged.

Passing
train dis-
charging
passengers.

106a. Freight trains must not obstruct the free passage of passengers between passenger station platforms or street crossings when passenger trains are due.

Not obstruct
passage - of
passengers.

106b. A train running upon or near the time of a train scheduled to carry passengers and to stop will exercise extreme caution prepared to stop, if necessary, in approaching and passing through such stations, expecting to find persons crossing tracks.

Caution
when run-
ning on time
of passen-
ger train.

D-106c. When two trains are nearing a station from opposite directions at the same time and only one of them is scheduled to stop, the train to stop must reduce speed to let the other pass the station before it arrives. When two trains going in opposite directions arrive at a station and both are scheduled to stop, the less important train will not go to platform until the other train has departed.

Two trains
approaching
station same
time.

In suburban districts, trains must not enter a station at which a passenger train in the opposite direction is standing or at which it is stopping to receive or discharge passengers, until the rear coach

of such train has passed the end of the station platform nearest the approaching train, unless the tracks are separated by fences.

Take safe course.

107. In case of doubt or uncertainty the safe course must be taken.

Messages or orders.

108. Messages or orders respecting the movement of trains or the condition of track or bridges must be in train order form.

Running track.

D-151. Trains must keep to the left, unless otherwise provided.

Crossing to opposite track.

D-152. When a train crosses over to, or obstructs the other track, unless otherwise provided it must first be protected as prescribed by Rule 99, in both directions on that track.

Obstruct movement of superior train.

D-152a. A train must not cross over to, or obstruct the movement of a superior train on another track, except to avoid delay to a superior train following.

Double track made single track.

D-152b. When double track is made single track it must be operated under single track and manual block rules.

Operators must block without special instructions.

Orders D-Form S must, when possible, be delivered to trains before they arrive at the single track district and when practicable be addressed to the operator at each end of the single track, who will deliver copies to trains entering upon the single track.

As an additional precaution a flagman will be placed at each end of the block of track obstructed.

Diverted trains.

D-152c. In diverting a train against the current of traffic the diverting order must, when practicable, be delivered to all trains on both tracks while the train is being diverted and when practicable be addressed to all operators in the district in which the train is diverted.

The diverted train will not cross back to its proper track without a train order. When possible, orders must be delivered to trains before they arrive at the diverting points.

RULES FOR MOVEMENT BY TRAIN ORDERS.

201. For movements not provided for by time-table, train orders will be issued by authority and over the signature of the chief train dispatcher. They must contain neither information nor instructions not essential to such movements.

Authority
to issue
orders.

They must be brief and clear; in the prescribed forms when applicable; and without erasure, alteration or interlineation.

Figures in train orders must not be surrounded by brackets, circles or other characters.

202. Each train order must be given in the same words to all employes or trains addressed.

Order in
same words.

203. Train orders must be numbered consecutively each day, beginning at midnight.

Numbering
orders.

204. Train orders must be addressed to those who are to execute them, naming the place at which each is to receive his copy. Those for a train must be addressed to the conductor and engineman, and also to any one who acts as its pilot. A copy for each employe addressed must be supplied by the operator.

Orders
addressed.

Orders addressed to operators restricting the movement of trains must be respected by conductors and enginemen the same as if addressed to them.

Record of
train
orders.

205. Each train order must be written in full in a book provided for the purpose at the office of the chief train dispatcher; and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices the order was repeated and the responses transmitted; and the train dispatcher's initials. These records must be made at once, and never from memory or memoranda.

Trains, how
designated.

206. In train orders regular trains will be designated as "No. 10," and sections as "Second 10." Extra trains will be designated by engine numbers, and the direction as "Extra 798 'East' or 'West.'"

In transmitting train orders by telegraph, time will be stated in words, and duplicated in figures.

In transmitting train orders by telephone the names of stations must be plainly pronounced, and then spelled, letter by letter, thus: Aurora, A-u-r-o-r-a; all numerals must first be pronounced, and then followed by spelling, thus: 1-0-5, O-n-e N-a-u-g-h-t F-i-v-e; the train dispatcher must write the order as he transmits it and underscore it as it is being repeated. The letters duplicating names of stations and numerals will not be written in the order book nor upon train orders.

Even hours must not be used in stating time of day in train orders, such as 10.00 a. m.

Engines of
foreign
railroads.

206a. When engines of foreign railroads are moved, train orders must show their initials prefixed to engine numbers.

207. To transmit a train order, the signal "31" or the signal "19" followed by the direction must be given to each office addressed, the number of copies being stated, if more or less than three—thus, "31, West, copy 5," or "19, East, copy 2."

Signal to
transmit
orders.

208. A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable. When not sent simultaneously to all, the order must be sent first to the superior train.

Transmission
of orders.

The several addresses must be in the order of superiority of trains, each office taking its proper address, and when practicable must include the operator at the meeting or waiting point.

Copies of the order addressed to the operator at the meeting or waiting point must be delivered to the trains affected until all have arrived from one direction.

A train order must not be sent to a superior train at the meeting point if it can be avoided. When an order is so sent, the fact will be stated in the order and special precautions must be taken to insure safety.

208a. When a train order (Form C) is sent, it must, when practicable, include the operator at the point where the rights of the train are restricted.

Restricting
rights.

208b. A "19" train order restricting the superiority of a train over an opposing train will not be sent to the point where such superiority is restricted.

Restricting
rights.

Restricting
rights.

208c. A train order restricting the rights of a passenger train must not be sent to the meeting or waiting point unless it is a regular stop for such train or the signature of the conductor is obtained before "Complete" is given to the inferior train.

Changing or-
der affecting
passenger
trains.

208d. When passenger trains are affected, in no instance must a meeting or waiting point be changed until the signature of the conductor of the train made superior by train order has first been obtained, or the order has been sent to station reached by the superior train before arriving at the meeting or waiting point also to the operator at the meeting or waiting point.

Take siding.

208e. When a train order is issued for trains to meet at a specified station directing which train will take siding, and it is desired to change meeting point, the first order will be annulled, or the second order will state specifically which train will take siding at the new meeting point.

Transmission
of orders.

D-208. A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable. When not sent simultaneously to all, the order must be sent first to the superior train.

The several addresses must be in the order of superiority of trains, each office taking its proper address.

Manifolding
and repeat-
ing orders.

209. Operators receiving train orders must write them in manifold during transmission. If they cannot at one writing make the requisite number of copies, they must make others from one of the copies previously made, and repeat to the train dispatcher from the new copies each time additional copies are made.

They must retain a copy of each train order.

210. When a "31" train order has been trans- Transmitting
31 orders.
mitted, operators must, unless otherwise directed, repeat it at once from the manifold copy in the succession in which the several offices have been addressed, and then write the time of repetition on the order. Each operator receiving the order should observe whether the others repeat correctly.

Those to whom the order is addressed, except enginemen, must then sign it, and the operator will send their signatures preceded by the number of the order to the chief train dispatcher. The response "complete," and the time, with the initials of the chief train dispatcher, will then be given by the train dispatcher. Each operator receiving this response will then write on each copy the word "complete," the time, and his last name in full, and then deliver a copy to each person addressed, except enginemen. The copy for each engineman must be delivered to him personally by conductor.

Enginemen must show train orders to firemen and when practicable to forward trainmen. Conductors must show train orders when practicable to trainmen.

210a. When there is more than one 31 When
to give
"complete."
order for a train at a station, "complete" must not be given to any of them until the signature has been obtained to all of them.

211. When a "19" train order has been Transmitting
19 form
orders.
transmitted, operators must, unless otherwise directed, repeat it at once from the manifold

copy, in the succession in which the several offices have been addressed. Each operator receiving the order should observe whether the others repeat correctly. When the order has been repeated correctly by an operator, the response "complete," and the time, with the initials of the chief train dispatcher, will be given by the train dispatcher. The operator receiving this response will then write on each copy the word "complete," the time, and his last name in full and personally deliver a copy to each person addressed without taking his signature. But when delivery to engineman will take the operator from the immediate vicinity of his office, the engineman's copy will be delivered by the conductor.

When a "19" train order restricting the superiority of a train is issued for it at the point where such superiority is restricted, the train must be brought to a stop before delivery of the order.

Enginemen must show train orders to firemen and when practicable to forward trainmen. Conductors must show train orders when practicable to trainmen.

Delivering
orders.

211a. When a train order is to be delivered by an operator outside of an office, it must be done from the platform side and never between tracks.

"X" re-
sponse.

212. When so directed by the train dispatcher, a train order may be acknowledged before repeating, by the operator responding: "X; (Number of Train Order) to (Train Number)," with the operator's initials and office signal. The operator must then write on the order his initials and the time.

212a. "X" is the operator's acknowledgment that an order has been received for a specified train, or trains, that the train order signal is displayed at "stop," and that the order will be delivered when made "complete" in accordance with the rules. Acknowledgment signal displayed.

213. "Complete" must not be given to a train order for delivery to an inferior train until the order has been repeated or the "X" response sent by the operator who receives the order for the superior train. "Complete" not to be given.

214. When a train order has been repeated or "X" response sent, and before "complete" has been given, the order must be treated as a holding order for the train addressed, but must not be otherwise acted on until "complete" has been given. "X" response holding order.

If the line fail before an office has repeated an order or has sent the "X" response, the order at that office is of no effect and must be there treated as if it had not been sent. Line failure.

216. For train orders delivered by the train dispatcher the requirements as to the record and delivery are the same as at other offices. Record of dispatcher.

217. A train order to be delivered to a train at a point not a train order office, or at one at which the office is closed, must be addressed to Delivery of order at non train order station.

"C. and E. ——— at ———, care of ———," and forwarded and delivered by the conductor or other person in whose care it is addressed. When form 31 is used "complete" will be given upon the signature of the person by whom the order is

to be delivered, who must be supplied with copies for the conductor and engineman addressed, and a copy upon which he shall take their signatures. This copy he must deliver to the first operator accessible, who must preserve it, and at once transmit the signatures of the conductor and engineman to the train dispatcher.

Orders so delivered must be acted on as if "complete" had been given in the usual way.

For orders which are sent, in the manner herein provided, to a train, the superiority of which is thereby restricted, "complete" must not be given to an inferior train until the signatures of the conductor and engineman of the superior train have been sent to the train dispatcher.

All sections
of a train.

218. When a train is named in a train order by its schedule number alone, all sections of that schedule are included, and each must have copies delivered to it.

"X" re-
sponse not
to be given.

219. An operator must not repeat or give the "X" response to a train order for a train which has been cleared or of which the engine has passed his train-order signal until he has obtained the signatures of the conductor and engineman to the order.

Orders
in effect.

✓ 220. Train orders once in effect continue so until fulfilled, superseded or annulled. Any part of an order specifying a particular movement may be either superseded or annulled.

Orders
become
void.

Orders held by or issued for or any part of an order relating to a regular train become void when such train loses both right and schedule as prescribed by Rules 4 and 82, or is annulled.

When a conductor or engineman, or both, is relieved before the completion of a trip, all train orders and instructions held must be delivered to the relieving conductor or engineman. Such orders or instructions must be compared by the conductor and engineman before proceeding.

✓ 220a. A list of orders and instructions transferred from one conductor or engineman to another as required by Rule 220, must be made in duplicate in writing and checked, each retaining a copy. Orders transferred.

220b. Conductors or enginemen will not be permitted to change trains before completion of a trip, without the consent of the chief train dispatcher. Changing trains.

220c. Orders held by an extra train, or any part of an order held by another train relating to an extra train become void when the existence of such extra train ends by limitation of time or place. Orders to extras, when expire.

221. A fixed signal must be used at each train-order office, which shall indicate "stop" when trains are to be stopped for train orders. When there are no orders the signal must indicate "proceed." Fixed signals.

When an operator receives the signal "31," or "19," followed by the direction, he must immediately display the "stop signal" for the direction indicated and then reply "stop displayed," adding the direction; and until the orders have been delivered or annulled the signal must not be restored to "proceed." While "stop" is indicated Display train order signal.

trains must not proceed without a Clearance Card (Form A).

Appliances
for hand
signaling.

Operators must have the proper appliances for hand signaling ready for immediate use if the fixed signal should fail to work properly. If a signal is not displayed at a night office, trains which have not been notified must stop and ascertain the cause, and report the facts to the chief train dispatcher from the next available point of communication.

Semaphore
indication.

Where the semaphore is used, the arm indicates "stop" when horizontal and "proceed" when in a vertical or diagonal position.

Office open
at irregular
hour.

221a. When a train order office is open at an irregular hour, trains must be notified by train order or special instructions, and special precautions must be taken to call the attention of trains approaching such station.

Interlocking
home signal
to stop
trains for
orders.

221b. At an interlocking plant in automatic signal territory the home interlocking signal may be used to stop trains for train orders. A red disc or red flag by day or red light by night so placed at the interlocking station that it can be seen from the train so stopped, will indicate to enginemen and trainmen that there are train orders.

Recording
and report-
ing trains.

222. Operators must promptly record and report to the train dispatcher the time of departure of all trains and the direction of extra trains. They must record the time of arrival of trains and report it when so directed.

223. The following signals and abbreviations may be used: Signs
and abbreviations.

Initials for signature of the division officers.

Such office and other signals as are arranged by the Superintendent of Telegraph.

C & E—for Conductor and Engineman.

C & M—for Conductor and Motorman.

X—Train will be held until train order is made "complete."

Com—for Complete.

O S—Train Report.

No.—for Number.

Eng—for Engine.

Sec—for Section.

Psgr—for Passenger.

Frt—for Freight.

Mins—for Minutes.

Jct—for Junction.

Dispr—for Train Dispatcher.

Opr—for Operator.

31 or 19—to clear the line for Train Orders, and for Operators to ask for Train Orders.

S D—for "Stop Displayed."

The usual abbreviations for the names of the months and stations.

RELAYING TRAIN ORDERS.

Relaying
orders.

241. To relay a train order through an open office to a train not in direct communication, the train dispatcher will transmit it to the operator at the relaying point, who will transmit it to destination. The person receiving it must repeat it to the relaying point and each word and number must be underscored by the receiver at that point. It must then be repeated to train dispatcher, and if correct, the train dispatcher will respond "correct." After the parties addressed at destination have signed the order, the signature must be given to relaying office and from there to train dispatcher, and "complete," time, and chief train dispatcher's initials will be given. Rules 206 and 210 will be observed.

Order re-
layed to su-
perior train.

242. A train order relayed to a superior train restricting its rights or superiority, must be sent and "complete" given and acknowledgment received, before the "complete" is given to the inferior train.

Filing
relayed
orders.

243. A copy of every relayed order must be filed at the point of relaying, bearing the name of the person receiving and repeating the order.

Train at
closed tele-
phone sta-
tion.

244. Upon the arrival of a train at a closed telephone station where a train is to be met or passed, if it is not in sight, the conductor must immediately communicate with the train dispatcher and report arrival of his train, giving his name, number of train or engine, and name of station or siding.

FORMS OF TRAIN ORDERS.

NOTE.—In the forms of train orders, the words and figures in italics are examples, indicating the manner in which the orders are to be filled out.

A.

Fixing Meeting Points for Opposing Trains.

- (1.) *No 1* meet *No 2* at *B*.
No 3 meet *Second 4* at *B*.
No 5 meet *Extra 95 east* at *B*.
Extra 652 north meet *Extra 231 south* at *B*.

-
- (2.) *No 2* and *Second 4* meet *Nos 1* and *3* at *C* and *Extra 95 west* at *D* (and so on).
No 1 meet *No 2* at *B* *Second 4* at *C* and *Extra 95 east* at *D*.

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner prescribed by the Rules.

B.

Directing a Train to Pass or Run Ahead of Another Train.

- (1.) *No 1* pass *No 3* at *K*.

Both trains will run according to rule to the designated point and there arrange for the rear train to pass promptly.

-
- (2.) *No 6* pass *No 4* when overtaken.

Both trains will run according to rule until the second-named train is overtaken and then arrange for the rear train to pass promptly.

(3) *Extra 594 east* run ahead of *No. 6 M to B*.

The first-named train will run ahead of the second-named train between the points designated.

(4.) *Extra 95 west* run ahead of *No 3 B* until overtaken.

The first-named train will run ahead of the second-named train from the designated point until overtaken, and then arrange for the rear train to pass promptly.

(5.) *No 1* pass *No 3* at *K* and run ahead of *No 7 M to Z*.

When an inferior train receives an order to pass a superior train, right is conferred to run ahead of the train passed from the designated point. Unless some form of block signals is used, the following train will run with caution, looking out for the designated train ahead until the order is fulfilled.

C.

Giving Right Over an Opposing Train.

(1.) *No 1* has right over *No 2 G to X*.

If the second-named train reaches the point last named before the other arrives, it may proceed, keeping clear of the opposing train as many minutes as such train was before required to clear it under the rules. If the first-named train is met between the designated points, the conductor of the second-named train must inform it of his arrival.

(2.) *Extra 37 east* has right over *No 3 F* to *A*.

The regular train must not go beyond the point last named until the extra train has arrived, unless directed by train order to do so.

These orders give right to the train first named over the other train between the points named. If the trains meet at either of the designated points, the first-named train must take the siding, unless the order otherwise prescribes.

E.

Time Orders.

(1.) *No 1* run *fifty 50 mins* late *A* to *G*.

This makes the schedule time of the train named, between the stations mentioned, as much later as stated in the order, and any other train receiving the order is required to run with respect to this later time, as before required to run with respect to the regular schedule time. The time in the order should be such as can be easily added to the schedule time.

(2.) *No 1* run *fifty 50 mins* late *A* to *G* and *twenty 20 mins* late *G* to *K*, etc.

This makes the schedule time of the train named, between the stations mentioned, as much later as stated in the order, and any other train receiving the order is required to run with respect to this later time as before required to run with respect to the regular schedule time. The time in the order should be such as can be easily added to the schedule time.

(3.) *No 1* wait at *H* until *nine fifty nine 9 59 a m* for *No 2*.

The train first named must not pass the designated point before the time given, unless the other train has arrived. The train last named is required to run with respect to the time specified, at the designated point or any intermediate station where schedule time is earlier than the time specified in the order, as before required to run with respect to the schedule time of the train first named.

(4.) *Nos 1 and 3* wait at *N* until *nine fifty nine 9 59 a m*.

P until *ten thirty 10 30 a m*.

R until *ten fifty five 10 55 a m* etc.

The train, or trains, named must not pass the designated points before the times given. Other trains receiving the order are required to run with respect to the time specified at the designated points or any intermediate station where schedule time is earlier than the time specified in the order as before required to run with respect to the schedule time of the train, or trains, named.

F.

For Sections.

F—For Sections.

(1.) *Eng 20* display signals and run as *First 1 A to Z*.

To be used when the number of the engine for which signals are displayed is unknown, and is to be followed by (2), both being single-order examples.

(2.) *Eng 25* run as *Second 1 A* to *Z*.

(3.) *No 1* display signals *A* to *G* for *Eng 65*.
Second 1 display signals *B* to *E* for *Eng 99*.

(4.) *Engs 20 25* and *99* run as *First Second*
and *Third 1 A* to *Z*.

To add an intermediate section (5) will be used.

(5.) *Eng 85* display signals and run as *Second 1 A* to *Z*. Following sections change numbers accordingly.

The engine named will display signals and run as directed, and following sections will take the next higher number.

To drop an intermediate section, (6) will be used.

(6.) *Eng 85* is withdrawn as *Second 1* at *H*. Following sections change numbers accordingly.

The engine named will drop out at *H*, and following sections will take the next lower number.

To substitute one engine for another on a section, (7) will be used.

(7.) *Eng 18* instead of *Eng 85* display signals and run as *Second 1 R* to *Z*.

The second-named engine will drop out at *R*, and be replaced by the first-named engine.

If the second-named engine is the last section, the words "display signals and" will be omitted. Following sections need not be addressed

To discontinue the display of signals, (8) will be used.

(8.) *Second 1* take down signals at *D*.

The train named will take down signals as directed, and a following section must not proceed beyond the designated point.

To pass one section by another, (9) will be used.

(9.) *Engs 99* and *25* reverse positions as *Second* and *Third 1 H* to *Z*.

Conductors and enginemen of the trains addressed will exchange orders and signals. Following sections, if any, need not be addressed.

Each section affected by these orders must have copies, and must arrange signals accordingly.

To annul a section for which signals have been displayed over a division, or any part thereof when no train is to follow the signals, Form K must be used.

When sections are run to an intermediate point of a schedule, the train orders must specify which section or sections shall assume the schedule beyond such point.

G.

Extra Trains.

(1.) *Eng 99* run extra *A* to *F*.

After *Extra 75* arrives at *F* *Eng 99* run *Extra F* to *A*.

(2.) *Eng 99* run extra *A* to *F* and return to *C*.

The extra must go to *F* before returning to *C*.

H.

Work Extra

(1.) *Eng 292 works extra six forty five 6 45 a m until five forty five 5 45 p m between D and E.*

The work extra must, whether standing or moving, protect itself against extras within the working limits in both directions as prescribed by the rules. The time of regular trains must be cleared.

This may be modified by adding:

(2.) *Not protecting against eastward extra trains.*

The work extra will protect only against westward extra trains. The time of regular trains must be cleared.

(3.) *Not protecting against extra trains.*

Protection against extra trains is not required. The time of regular trains must be cleared.

When a work extra has been instructed by order to not protect against extra trains, and, afterward, it is desired to have it clear the track for, or protect itself after a certain hour against a designated extra, an order may be given in the following form:

(4.) *Work Extra 292 clears, or protects against, Extra 76 east between D and E after two ten 2 10 p m.*

Extra 76 east must not enter the working limits before 2 10 p m., and will then run expecting to

find the work extra clear of the main track, or protecting itself, as the order may require.

To enable a work extra to work upon the time of a regular train, the following form will be used:

(5.) *Work Extra 292 protects against No 55, or ——— class trains, between D and E.*

The work extra may work upon the time of the train or trains mentioned in the order, and must protect itself against such train or trains. The regular train or trains receiving the order will run expecting to find the work extra protecting itself.

When a work extra is to be given exclusive right over all trains the following form will be used:

(6.) *Work Extra 292 has right over all trains between D and E seven fifteen 7 15 p m until one fifteen 1 15 a m.*

This gives the work extra the exclusive right between the points designated between the times named.

Work extras must give way to all trains as promptly as practicable.

Whenever extra trains are run over working limits, they must be given a copy of the order sent to the work extra. Should the working order instruct a work extra to not protect against extra trains in one or both directions, extra trains must protect against the work extra; if the order indicates that the work extra is protecting itself against other trains, they will run expecting to find the work extra protecting itself.

The working limits should be as short as practicable; to be changed as the progress of the work may require.

D - H.

Work Extra.

- (1.) *Eng 292 works extra on eastward track, or both tracks, six forty five 6 45 a m until five forty five 5 45 p m between D and E.*

The work extra must, whether standing or moving, protect itself within the working limits against extras moving with the current of traffic on the track or tracks named. The time of regular trains must be cleared.

This form may be modified by adding:

- (2.) *Not protecting against extra trains.*

Protection against extra trains is not required. The time of regular trains must be cleared.

To enable a work extra to work upon the time of a regular train, the following form may be used:

- (3.) *Work extra 292 protects against No. 55, or ——— class trains, between D and E.*

The work extra may work upon the time of the train or trains mentioned in the order and must protect against such train or trains.

The regular train or trains receiving the order will run expecting to find the work extra protecting itself.

When it is desired to move a train against the current of traffic over the working limits, provision must be made for the protection of such movement.

When a work extra is to be given exclusive right over all trains, the following form will be used:

- (4.) *Work extra 292 has right over all trains on eastward and westward tracks between G and H seven one 7 01 p m until one one 1 01 a m.*

This gives the work extra the exclusive right to the track, or tracks, mentioned between the points designated between the times named.

Work extras must give way to all trains as promptly as practicable.

The working limits should be as short as practicable; to be changed as the progress of the work may require.

J.

Holding Order.

Hold No 2.

Hold all, or eastward, trains.

When a train has been so held it must not proceed until the order to hold is annulled, or an order given to the operator in the form:

——— *may go.*

These orders will be addressed to the operator and acknowledged in the usual manner, and will be delivered to conductors and enginemen of all trains affected.

Form J will be used only when necessary to hold trains until orders can be given, or in case of emergency.

K.

Annuling a Schedule or a Section.

No 1 due to leave A Feb 29th is annulled A to Z.

Second 5 due to leave E Feb 29th is annulled E to G.

The schedule or section annulled becomes void between the points named and cannot be restored.

L.

Annuling an Order.

When addressed to a train (1) will be used.

(1.) Order *No 10* is annulled.

When addressed to an operator (2) or (3) will be used.

(2.) Order *No 12 to C & E No 2* is annulled.

(3.) Provided *No 1* has arrived at "G," order *No 12 to C & E No 2* is annulled.

If an order which is to be annulled has not been delivered to a train, the annulling order will be addressed to the operator, who will destroy all copies of the order annulled but his own, and write on that:

Annulled by Order No ———.

An order which has been annulled must not be reissued under its original number.

M.

Annuling Part of an Order.

That part of Order *No 10* reading *No 1 meet No 2 at S* is annulled.

That part of Order *No 12* reading *No 3 pass No 1 at S* is annulled.

D-M.

Annuling Part of an Order.

That part of Order *No 10* reading *Extra 263 west pass No 1 at S* is annulled.

That part of Order *No 12* reading *No 3 pass No 1 at S* is annulled.

P.

Superseding an Order or a Part of an Order.

This order will be given by adding to prescribed forms the words "instead of ———."

- (1.) *No 1* meet *No 2* at *C* instead of *B*.
—————
- (2.) *No 3* pass *No 1* at *D* instead of *C*.
—————
- (3.) *No 1* has right over *No 2* *G* to *R* instead of *X*.
—————
- (4.) *No 1* display signals for *Eng 85 A* to *Z* instead of *G*.

An order which has been superseded must not be reissued under its original number.

When a train is directed by train order to take siding for another train, such instructions apply only at the point named in that order, and do not apply to the superseding order unless so specified.

D-P.

Superseding an Order or a Part of an Order.

This order will be given by adding to prescribed forms, the words "instead of ———."

- (1.) *No 1* pass *No 3* at *C* instead of *B*.
—————
- (2.) *No 1* display signals for *Eng 85 A* to *Z* instead of *G*.

An order which has been superseded must not be reissued under its original number.

D-R.

Providing for a Movement Against the Current of Traffic.

- (1.) *No 1* has right over opposing trains on *No 2*, or eastward, track *C* to *F*.

The designated train must use the track specified between the points named and has right over opposing trains on that track between those points. Opposing trains must not leave the point last named until the designated train arrives.

An inferior train between the points named moving with the current of traffic in the same direction as the designated train must receive the copy of the order, and may then proceed on its schedule, or right.

This order may be modified as follows:

(2.) After No 4 arrives at C No 1 has right over opposing trains on No 2, or eastward, track C to F.

The train to be moved against the current of traffic must not leave the first-named point until the arrival of the first-named train.

A train must not be moved against the current of traffic until the track on which it is to run has been cleared of opposing trains.

D-S.

Providing for the Use of a Section of Double Track as Single Track.

No 1, or westward, track will be used as single track between F and G.

If it is desired to limit the time for such use, add from one naught one 1 01 p m to three naught one 3 01 p m.

All trains must use the track specified between the stations named and will be governed by rules for single track.

Trains running against the current of traffic on the track named must be clear of the track at the expiration of the time named, or protected as prescribed by Rule 99.

**RULES GOVERNING THE MOVEMENT OF
TRAINS WITH THE CURRENT OF
TRAFFIC ON TWO OR MORE
TRACKS BY BLOCK
SIGNALS**

Run by
block
signals.

D-251. On portions of the road so specified on the time-table, trains will run with the current of traffic by block signals whose indications will supersede time-table superiority.

Movement
supervised.

D-252. The movement of trains will be supervised by the chief train dispatcher, who will issue instructions to signalmen when required.

Obtain
permission
to work.

D-253. A train having work to do which may detain it more than ten minutes, must obtain permission from the signalman at the last station at which there is a siding before entering the block in which work is to be done. The signalman must obtain authority to give this permission from the chief train dispatcher.

Train
rules re-
main in
force.

D-254. Except as affected by Rules D-251 to D-253, all Block Signal Rules and Train Rules remain in force.

**RULES GOVERNING THE MOVEMENT OF TRAINS
AGAINST THE CURRENT OF TRAFFIC ON TWO
OR MORE TRACKS BY BLOCK SIGNALS.**

Run by
block
signals.

D-261. On portions of the road so specified on the time-table, trains will run against the current of traffic by block signals, whose indications will supersede time-table superiority and will take the place of train orders.

Interlocking
signal to
stop trains
for orders.

D-261a. On portions of the road where trains are run against the current of traffic by block signals, interlocking signals may be used as block signals.

D-262. The movement of trains will be supervised by the chief train dispatcher, who will issue instructions to signalmen. Movement supervised.

D-263. A train must not cross over, except as provided in Rule D-261, without authority from the chief train dispatcher. Crossing over.

D-264. Except as affected by Rules D-261 to D-263, all Block Signal Rules and Train Rules remain in force. Block and train rules in force.

ADDITIONAL RULES FOR THREE OR MORE TRACKS.

F-271. The main tracks shall be designated by numerals, and their use indicated by special instructions. Tracks, how designated.

F-272. On portions of the road so specified on the time-table, trains will run with the current of traffic by block signals, whose indications will supersede time-table superiority. Run by block signals.

F-272a. On portions of the road so specified on the time-table, or by special instructions, extra trains will run with the current of traffic without train orders. Run without orders.

✓ *F-273. A train by night running with the current of traffic, on an express track, will display two red lights to the rear.* Markers displayed.

A train by night running with the current of traffic, on a local track, will display a green light to the rear on the side next to an express track in the direction of the current of traffic, and a red light on the opposite side.

A train by night using any track against the current of traffic will display two green lights to the rear, one on each side, with a red light on the platform or cupola.

A train by night on a siding will display two green lights to the rear.

See diagrams.

✓ *F-274.* ENGINE AND MOTOR WHISTLE SIGNALS.

NOTE.—The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds. The sound of the whistle should be distinct, with intensity and duration proportionate to the distance signal is to be conveyed.

SOUND	INDICATION
(a) — — — — —	Flagman for Track No. 1 may return.
(b) — — — — —	Flagman for Track No. 2 may return.
(c) — — — — — o	Flagman for Track No. 3 may return.
(d) — — — — — o	Flagman for Track No. 4 may return.
(e) o — — — — —	Flagman for Track No. 5 may return.
(f) o — — — — —	Flagman for Track No. 6 may return.
(g) o — — — — — o	Flagman for Track No. 7 may return.
(h) o — — — — — o	Flagman for Track No. 8 may return.

F-275. Except as affected by Rules *F-271* to *F-274*, all Block Signal Rules and Train Rules for Double Track remain in force.

FORM
31

UNITED STATES RAILROAD ADMINISTRATION

FORM
31

CHICAGO & NORTH-WESTERN RAILROAD

TRAIN ORDER No. 10

(Nov. 1, 1916)

To

At (Station)

To

X (Initials)

Opr.;

(1.45 A) M

Conductor and Engineman must each have a copy of this order.

Repeated at

2.20 A M

Conductor	Train	Made	Time	Opr.
Jones	"45"	Complete	2.20 AM	Black

(To be printed on yellow paper)

FORM
19

UNITED STATES RAILROAD ADMINISTRATION

FORM
19

CHICAGO & NORTH WESTERN RAILROAD

TRAIN ORDER No. 10

April 1, 1916

To _____
To _____

At _____ (Station)

X _____ (Initials) Opr.: _____ 1 45 A M

Conductor and Engineman must each have a copy of this order.

Made Complete time 2 16 P M.

Black Opr.

(To be printed on green paper)

FORM A

UNITED STATES RAILROAD ADMINISTRATION

CHICAGO & NORTH WESTERN RAILROAD CLEARANCE CARD

Dover 9:15 A. M. November 17 19 15

Conductor and Engineman No. 12

I have Orders 3-71-98 No No further orders for your train.

Stop signal is displayed For Extra 452 Cannot be Cleared

Block Clear

John Jones

Operator

This does not affect any orders you may have received.

Conductor and Engineman must each have a copy, and see that their train is correctly designated in the above form.

Where Clearance Card, Form A, is used when the block is not clear, the line giving block indication will be left blank, and Permissive Card, Form C, used in addition to Form A.

(See rule 221.)

(To be printed on white paper)

FORM B.

UNITED STATES RAILROAD ADMINISTRATION

CHICAGO & NORTH WESTERN RAILROAD

CAUTION CARD.

BLOCK STATION.....;.....M.,191

To C. & E. train.....on.....track:

This card is authority to pass Stop-signal for.....track. You may proceed with caution. Signal indicates stop on account of.....

.....

.....*Signalman.*

Conductors and Enginemen receiving this card properly filled in and signed by the signalman, may proceed with the train under control prepared to stop short of any obstruction.

When Form B is used on account of failure of means of communication, this card must be delivered to the signalman at the next block station in advance, and the engineman must personally obtain from the signalman permission to proceed.

(See Rules 332-332a and 362.)

Order No.....

FORM C.

UNITED STATES RAILROAD ADMINISTRATION

CHICAGO & NORTH WESTERN RAILROAD

PERMISSIVE CARD.

BLOCK STATION.....;M.,191 .

To C. & E. train.....on.....track:

Proceed, expecting to find a train in the block between this station and.....
.....

.....*Signalman.*

Form C may be used when a Stop-signal is displayed and it is permissible to admit a following train to the block.

Conductors and Enginemen receiving this card will proceed as indicated.

(See Rules 317-317b, 327-327a, 331 and 362.)

(To be printed on pink paper)

FORM C-1.

UNITED STATES RAILROAD ADMINISTRATION

CHICAGO & NORTH WESTERN RAILROAD

PERMISSIVE CARD

BLOCK STATION.....;M., , 191

To C. & E. train.....:

Proceed, expecting to meet.....at.....except as above
block is clear.

.....*Signalman*

Form C-1 may be used when it is permissible to admit an opposing train to the block.
Conductors and Enginemen receiving this card will proceed as indicated.

(See rules 3:7a and 362c)

(To be printed on yellow paper)

(To be printed on pink paper)

UNITED STATES RAILROAD ADMINISTRATION

CHICAGO & NORTH WESTERN RAILROAD

PERMISSIVE CARD

TO CROSS OVER, SWITCH, RE-ENTER A BLOCK OR MOVE AGAINST
THE CURRENT OF TRAFFIC

BLOCK STATION.....;M., 191 .

To C. & E. train.....

I have complied with the rules. You may use.....track
.....to.....protecting
as per rule 99.

.....*Signalman*

This does not confer any rights under time table or by train order.

(See rules 327b, 334, 361, 366a and 366b.)

(To be printed on white paper, red letters)

FORM A-1

UNITED STATES RAILROAD ADMINISTRATION

**Chicago & North Western Railroad
CLEARANCE CARD.**

Dover

9 15 A M

March 21

19 16

Conductor and Engineman..... No. 12

I have no orders for your train.

Last train ahead left at.....

.....(John Jones)

SIGNALMAN.

This does not affect any orders you may have received.

Conductor and Engineman must each have a copy, and see that their train is correctly designated in the above form.

(See Rule 91b.)

(To be printed on white paper, green letters)

UNITED STATES RAILROAD ADMINISTRATION**Chicago & North Western Railroad****TRAIN REGISTER CHECK.**

Train Register at

Checked by.....Conductor.

Train.....19.....

At.....M.

Train	Arrive	Depart	Signals

Before leaving any register station conductor must enter on this blank all trains affecting his rights, and personally deliver to engineman. Engineman will not leave any register station without it, and must satisfy himself that no train affecting his right to proceed is omitted. See Rule 83c.

(To be printed on white paper)

UNITED STATES RAILROAD ADMINISTRATION

Chicago & North Western Railroad

TRAIN REGISTER CHECK.

Chicago & North Western Railroad

CLEARANCE CARD

Checked by _____

Train No. _____

At _____

Train _____

Arrive _____

Depart _____

Signal _____

RULES
FOR
BLOCK SIGNALING
AND
INTERLOCKING

BLOCK SIGNALING.

DEFINITIONS

BLOCK.—A length of track of defined limits, the use of which by trains is governed by block signals.

BLOCK STATION.—A place from which block signals are operated.

FIXED SIGNAL.—A signal of fixed location, indicating a condition affecting the movement of a train.

BLOCK SIGNAL.—A fixed signal governing the use of a block.

HOME BLOCK SIGNAL.—A fixed signal at the entrance of a block to govern trains in entering and using that block.

DISTANT BLOCK SIGNAL.—A fixed signal used in connection with a Home Block Signal to govern the approach thereto.

BLOCK SYSTEM.—A series of consecutive blocks.

MANUAL BLOCK SYSTEM.—A series of consecutive blocks, governed by block signals operated manually, upon information by telegraph, telephone or other means of communication.

AUTOMATIC BLOCK SYSTEM.—A series of consecutive blocks governed by block signals operated by electric, pneumatic or other agency actuated by a train, or by certain conditions affecting the use of a block.

POSITIVE BLOCK.—Where only one train is allowed in a block.

PERMISSIVE BLOCK.—Where more than one train is allowed in a block.

TIME SPACING.—A method of spacing trains an interval of time.

INTERMEDIATE SIDING.—(1) A siding between block stations: (2) A siding where block office is closed.

As the safety of trains largely depends on the proper observance of signals and that they are controlled in accordance with the indications given, it is of the utmost importance that employes having anything to do with the operation of trains be perfectly familiar with the meaning of the signals. All such employes will be required to attend the school of instruction, held in the Company's signal instruction car.

MANUAL BLOCK SYSTEM.

REQUISITES OF INSTALLATION.

1. Signals of prescribed form, the indications given by not more than three positions; by lights of prescribed color; or by both.

2. The apparatus so constructed that the failure of any part controlling the operation of a signal will cause it to display its most restrictive indication.

3. Signals located preferably over or upon the right of and adjoining the track to which they

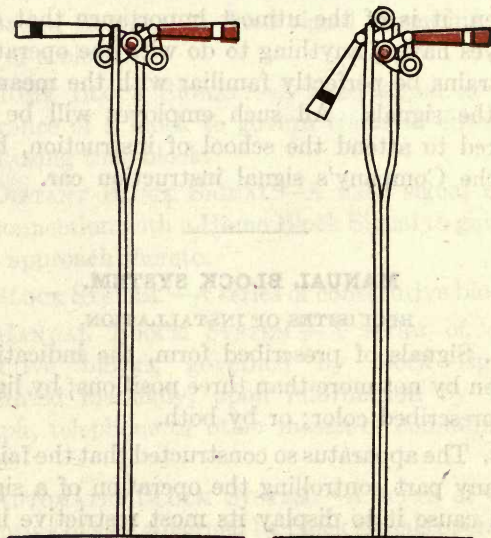
refer. For less than three tracks signals for trains in each direction may be on the same signal mast.

4. Semaphore arms that govern, displayed to the right of the signal mast as seen from an approaching train.

5. The normal indication of Home Block Signals—Stop.

RULES

Two-Position Home Block Signals

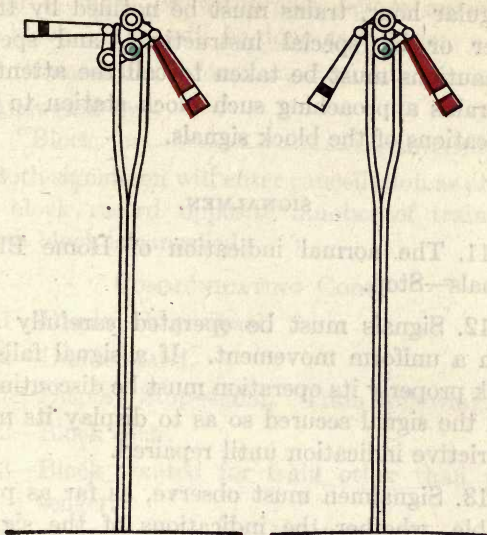


INDICATION — STOP.

NAME — STOP-SIGNAL.

302 A.

Two-Position Home Block Signals



INDICATION — PROCEED.

NAME — CLEAR-SIGNAL.

302 C.

305. Block signals govern the use of the blocks, but, unless otherwise provided, do not supersede the superiority of trains; nor dispense with the use or the observance of other signals whenever and wherever they may be required.

305a. Block signals may also be used as train order signals.

The district in which trains are to be governed by block signals will be defined by time-table or special instructions.

306. When a block station is open at an irregular hour, trains must be notified by train order or by special instructions, and special precautions must be taken to call the attention of trains approaching such block station to the indications of the block signals.

SIGNALMEN.

311. The normal indication of Home Block Signals—Stop.

312. Signals must be operated carefully and with a uniform movement. If a signal fails to work properly its operation must be discontinued and the signal secured so as to display its most restrictive indication until repaired.

313. Signalmen must observe, as far as practicable, whether the indications of the signals correspond with the positions of the levers.

314. Signalmen must not make nor permit any unauthorized repairs, alterations or additions to the apparatus.

315. A block record must be kept at each block station.

315a. Signalmen will properly record trains, beginning at 12:01 a. m. daily, on block record.

When a train is passed by another at a block station it must be re-entered upon the block record.

The last train entering or leaving a block must be the last recorded.

315b. If authority to enter a block has been given it must be withdrawn before cancelling the block. This will be done as follows:

“Cancel block for_____.”

Answered by:

“Block for_____cancelled.”

Both signalmen will enter cancellation as above on block record opposite number of train for which block is cancelled.

316. COMMUNICATING CODE.

- 1—Display Stop-signal.
- 13—I understand.
- 17—Display Stop-signal. Train following.
- 2—Block clear.
- 3—Block wanted for train other than passenger.
- 36—Block wanted for passenger train.
- 4—Train other than passenger has entered block.
- 46—Passenger train has entered block.
- 5—Block is not clear of train other than passenger.
- 56—Block is not clear of passenger train.
- 7—Train following.
- 8—Opening block station. Answer by record of trains in the extended block.
- 9—Closing block station. Answer by 13.

When two or more tracks are used in the same direction, signalmen in using the communicating code must also specify the track.

316a. When the telephone is used the code will be used without the numerals. Numbers and direction after being given will be spelled out letter by letter.

317. To admit a train to a block, the signalman must examine the block record, and, if the block is clear, give "1 for———" to the next block station in advance. The signalman receiving this signal, if the block is clear, must display the Stop-signal to opposing trains and reply "2 for———." If the block is not clear, he must reply "5 of ——," or "56 of ——." The signalman at the entrance of the block must then display the proper signal indication.

A train must not be admitted to a block which is occupied by an opposing train or by a passenger train, except as provided in Rule 332 or by train order.

To permit a train to follow a train other than a passenger train into a block, the signalman must give "17 for———" to the next block station in advance. The signalman receiving this signal, if there is no passenger train in the block, must reply "5 of —— 13 for———." The approaching train will then be admitted to the block with Permissive Card (Form C).

317a. A train may be permitted to enter a block that is not clear under following conditions:

1. When trains are to meet at an intermediate siding each must receive a Permissive Card (Form C-1).

2. When trains are to meet at a station where the entire siding is in advance of block signal, or when a train is at a station awaiting arrival of an opposing train, and it is desired that it shall depart promptly when opposing train has arrived and cleared the switch, signalman may issue a Permissive Card (Form C-1).

3. When a train enters a block by clear signal indication and fails to clear it as intended for a superior train, trains in the opposite direction, by a Permissive Train Order as prescribed by Rule 317b.

4. For a following movement, a passenger train by Permissive Train Order, except as provided in Rule 332.

317b. Permissive Card (Form C) will only be issued when authorized by the chief train dispatcher on the following form:

"To ———."

"Issue Permissive Card (Form C) No. ——— to ———."

This will be sent, repeated and complete given in the manner prescribed for train orders, and entered in train dispatcher's train order book.

Permissive train order will be issued by train dispatcher on Form 31 in the following form:

"To C and E ———."

"You may proceed from——to——prepared to stop short of train or obstruction, account ——."

318. To admit a train to a block, the signalman must examine the block record, and, if the block is clear, give "3 for——," or "36 for

———,” to the next block station in advance. The signalman receiving this signal, if the block is clear, must reply “2 for———.” If the block is not clear, he must reply “5 of———,” or “56 of———.” The signalman at the entrance of the block must then display the proper signal indication.

A train must not be admitted to a block unless it is clear, except as provided in Rule 332 or by train order.

319. When a train enters a block, the signalman must give “4———,” or “46 ——” and the time, to the next block station in advance, and when the train has passed the Home Block Signal and the signalman has seen the markers he must display the Stop-signal, and when the rear of the train has passed 300 feet beyond the Home Block Signal, he must give the record of the train to the next block station in the rear.

This information must be entered on the block records.

320. Unless otherwise provided, signalmen must not ask for the block until they have received a report of the train from the next block station in the rear.

321. Signalmen must observe all passing trains and note whether they are complete and in order, and the markers properly displayed.

322. Should a train pass a block station with any indication of conditions endangering the train, or a train on another track, the signalman must immediately notify the signalman at the

next block station in advance, and each must display Stop-signals to all trains that may be affected, and must not permit any train to proceed until it is known that its track is not obstructed.

323. Should a train pass a block station without markers, the signalman must notify the signalman at the next block station in each direction, and must not report that train clear of the block until he has ascertained that the train is complete.

324. Should a train pass a block station in two or more parts, the signalman must stop all trains moving in the same direction and notify the signalman at the next block station in advance. A signalman having received this notice must stop all trains moving in the opposite direction. The Stop-signal must not be displayed to the engineman of the parted train if the train can be admitted to the block in advance under Block Signal Rules; but the Train-parted Signal must be given. Should a train in either direction be stopped, it may be permitted to proceed when it is known that its track is not obstructed.

325. A signalman informed of any obstruction in a block must immediately notify the signalman at the other end of the block and each must display Stop-signals to all trains that may be affected and must not permit any train to proceed until it is known that its track is not obstructed.

326. When a train takes a siding the signalman must know that it is clear of the block before

giving 2 or displaying a Clear-signal for that block.

The signalman must obtain control of the block before permitting a train on a siding to re-enter the block.

327. To permit a train to cross over or return, unless otherwise provided, the signalman must examine the block record, and if all the blocks affected are clear of approaching trains he must arrange with the signalman at the next block station in each direction to protect the movement, and when the proper signals have been displayed permission may be given. Until the block is clear no train must be admitted in the direction of the cross-over switches except under Permissive-signal or with Permissive Card (Form C).

All cross-over movements must be entered on the block records.

327a. To permit a train to do switching or re-enter a block, the signalman must examine the block record, and if the blocks affected are clear of approaching trains he must arrange with the signalman at the next block station in each direction to protect the movement, and when the proper signals have been displayed permission may be given. Until the block is clear no train must be admitted in the direction of these movements except with Permissive Card (Form C). All such movements must be entered on the block records.

327b. When the proper signals have been displayed for a cross-over movement, a switching movement, or a movement to re-enter the

block, the signalman may issue Permissive Card (Form C-2), which must be taken up before block is released.

328. When coupled trains are separated, as prescribed by Rule 364, the signalman must regard each portion as an independent train.

329. If necessary to stop a train for which a Clear Home Block Signal has been displayed and accepted, the signalman must give hand signals in addition to displaying the Stop-signal.

329a. A signalman will not accept "1" requiring him to hold a train that has been given a clear block, after the engine has once passed the signal, until the train has been stopped and the conductor and engineman notified.

330. A signalman having train orders for a train must display the block signal at Stop. He may permit trains so stopped to proceed under Block Signal Rules after complying with Rules for Movement by Train Orders.

330a. When there are no train orders and the block in advance has been obtained, the proper signal indication should be given in time to permit a train to enter without unnecessary delay.

331. If, from the failure of block signal apparatus, the block signal cannot be changed from the normal indication, a signalman having information from the signalman at the next block station in advance that the block is clear, may admit a train to the block by the use of Clearance Card (Form A).

If the block is occupied by a train, other than an opposing train or a passenger train, the signalman may admit a following train by the use of Permissive Card (Form C).

332. If, from any cause, a signalman is unable to communicate with the next block station in advance, he must stop all trains approaching in that direction. Should no cause for detaining a train be known, it may then be permitted to proceed with Caution Card (Form B), provided ten minutes have elapsed since the passage of the last preceding train.

332a. Caution Card (Form B) must not be issued when communication can be had with the train dispatcher.

333. Signalmen must have the proper appliances for hand signaling ready for immediate use. Hand signals must not be used when the proper indication can be displayed by the block signals, except as prescribed by Rule 329 or 343. When hand signals are necessary they must be given from such a place and in such a way that there can be no misunderstanding on the part of enginemen or trainmen as to the signals, or as to the train or engine for which they are given.*

334. Block signals for a track apply only to trains moving with the current of traffic on that track. Signal men will use Permissive Card (Form C-2) and Clearance Card (Form A) and

*NOTE TO RULE 333.—Hand signaling includes the use of lamp, flag, torpedo and fusee signals.

in addition, if block is occupied, Permissive Card (Form C) for blocking trains moving against the current of traffic.

335. Signalmen will be held responsible for the care of the block station, lamps and supplies; and, unless otherwise provided, of the signal apparatus.

336. Lights in block stations must be so placed that they cannot be seen from approaching trains.

337. Lights must be used upon all block signals from sunset to sunrise and whenever the signal indications cannot be clearly seen without them.

338. If a train overruns a Stop-signal, the fact must be reported to the chief train dispatcher.

339. If a Stop-signal is disregarded, the fact must be reported to the next block station in advance and then to the chief train dispatcher.

340. To open a block station the signalman must give 8 to the next block station in each direction and record the trains that are in the extended block. He must then display the normal signal indication and notify the next block station in each direction that the block station is open.

When trains, which were in the extended block when the block station was opened and which had passed his block station before it was opened, clear the block in advance he must repeat the record to the block station in the rear.

340a. Block circuits, under normal conditions, must not be extended through block offices when signalmen are on duty.

341. A block station must not be closed except upon authority of the chief train dispatcher.

341a. When one signalman relieves another, the one going off duty will make transfer on prescribed form, signing it. The transfer must also be signed by the one coming on duty.

342. Unless otherwise provided, a block station must not be closed until the block in each direction is clear of all trains.

To close a block station, the signalman must give 9 to the next block station in each direction, and when he receives 13 enter it on his block record, with the time it is received from each block station.

The block signals must then be cleared, all lights extinguished and the block wires arranged to work through the closed block station.

343. When a block station is open at an irregular hour, signalmen must use hand signals, in addition to block signals, to give the required indications until all trains have passed which have not been notified by train order or by special instructions that the block station is open. Signalmen must take special precautions to call the attention of trains approaching the block station to the indications of the block signals.

343a. When a block station is closed at an irregular hour, all trains that may be affected must be notified.

344. Signalmen must not permit unauthorized persons to enter the block station.

361. Block signals for a track apply only to trains moving with the current of traffic on that track. Permissive Card (Form C-2) and Clearance Card (Form A) and in addition, if block is occupied, Permissive Card (Form C) will be used for blocking trains moving against the current of traffic.

361a. Except as per rules 85 and *D-85*, inferior trains must clear a block before a superior train is due to enter it.

361b. A train entering a block by authority of clear signal and failing to clear it, as intended for a superior train, must take intermediate siding or protect as prescribed by Rule 99.

✓ 362. Trains must not pass a Stop-signal without receiving Clearance Card (Form A), Caution Card (Form B), Permissive Card (Form C), or a train order authorizing them to do so.

✗ 362a. A train may pass a stop signal to make a station stop, to take coal or water, or to enter a siding beyond the signal, provided the track is known to be clear.

362b. Trains moving under Permissive Card (Form C) may follow the next preceding train as provided in Rule 91a and time-table instructions.

362c. Trains meeting at an intermediate siding must each receive a Permissive Card (Form C-1); this will not permit the inferior train passing the station indicated until the superior train has been met. Should the inferior train fail to reach

a siding, it must protect as prescribed by Rule 99. The superior train may proceed with caution from the station indicated until the expected train is met.

362*d*. A train passed at an intermediate siding by a passenger train, must not follow within fifteen minutes.

362*e*. Proper authority to occupy a block must be obtained from signalman before proceeding.

(1) By trains arriving at a block station where signal indicates stop:

(2) By trains occupying sidings.

(3) To re-enter a block.

(4) To do switching or cross over.

(5) To move against the current of traffic.

(6) By trains starting from their terminals.

363. Trains must not proceed on hand signals as against block signals.

364. Unless otherwise directed, when two or more trains have been coupled and so move past any block station, they must be separated only at a block station and the signalman notified.

365. When a train takes a siding it must not again enter the block without the permission of the signalman.

A train having passed beyond the limits of a block must not back into that block without permission from the signalman.

366. Unless otherwise provided, when it is necessary for a train to cross over, the signalman must be notified and permission obtained before crossing over or returning.

✓ 366a. A Permissive Card (Form C-2) must be obtained to occupy opposite track, do switching or re-enter a block and must be returned when the movements are completed; this will not relieve trainmen from compliance with Rule 99.

✓ 366b. A Permissive Card (Form C-2) must be obtained at each station when moving against the current of traffic.

367. The engineman of a train which has parted must sound the whistle signal for Train-parted when approaching a block station.

368. An engineman receiving a Train-parted signal from a signalman must answer by the whistle signal for Train-parted.

369. When a parted train is recoupled the signalman must be notified.

370. If there is an obstruction between block stations notice must be given to the nearest signalman.

371. If a train is stopped by a block signal the conductor and engineman must immediately ascertain the cause.

371a. Trainmen must watch the block signal and be governed by its indication until the entire train has passed.

372. Conductors must report to the chief train dispatcher any unusual detention at block stations.

372a. At a block station where there is no siding, if the signal is at stop, and if the signalman is absent or incapacitated, trains must wait ten

minutes and then proceed with caution to the next block station, where the conductor must report the fact to the chief train dispatcher.

373. A block station must not be considered as closed, except as provided for by time-table or special instructions.

374. Time-tables or special instructions indicate block stations.

TIME SPACING.

380. In districts in which the movement of trains is not controlled by the manual or automatic block system, trains will be spaced under special instructions contained in the time-table of each division, by train order signal.

381. When a train has passed train order signal and the signalman has seen the markers he must display the Stop signal and keep it in that position after the train has departed, as per Rule 91a.

382. When a train is passed by another at a station or intermediate siding, the following train may proceed, as per Rule 91a.

383. Operators will record in a book the arrival and departure of each train.

AUTOMATIC BLOCK SYSTEM.

REQUISITES OF INSTALLATION.

1. Signals of prescribed form, the indications given by not more than three positions; by lights of prescribed color; or by both.

2. The apparatus so constructed that the failure of any part controlling the operation of a signal will cause it to display its most restrictive indication.

3. Signals located preferably over or upon the right of and adjoining the track to which they refer.

3a. On double track signals, if practicable, will be located over or upon the left of and adjoining the track to which they refer.

4. Semaphore arms that govern, displayed to the right of the signal mast as seen from an approaching train.

4a. When one arm is used on an upper quadrant semaphore signal a marker will be used placed below the arm and extending to the right of the signal mast on a Stop signal and to the left on a Stop and Proceed signal. At night the marker will show a white light vertically below the upper light on a Stop signal and diagonally below on a Stop and Proceed signal.

When two arms are used on an upper quadrant semaphore signal the lower semaphore casting will appear to the right of the signal mast on a Stop signal and to the left of the signal mast on a Stop and Proceed signal. At night the lower light will show vertically below the

upper light on a Stop signal and diagonally below on a Stop and Proceed signal.

4b. Where the disc is used, the indications will be given by two positions of a red or green disc, and, in addition, at night, by lights of prescribed color. The face of a home signal case is painted black, and the back yellow. The face of a distant signal case is painted white and the back yellow.

6. Continuous track circuits.

7. Signal connections and operating mechanism so arranged that a Home Block Signal will display the indications provided in Rules 501 A, 501 AA or 501 G after the front of a train shall have passed it.

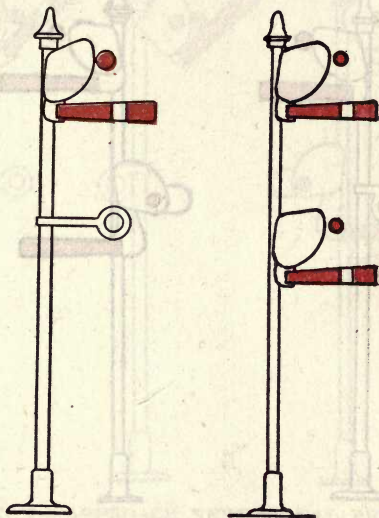
8. Switches in the main track so connected with the block signals that the Home Block Signal in the direction of approaching trains will display the indications provided in Rules 501 A, 501 AA or 501 G when the switch is not set for the main track.

8a. Cross-over switches between the main tracks so connected with the block signals, that the Home Block Signals in the direction of approaching trains will display the indications provided in Rules 501 A or 501 AA when either switch of the cross-over is not set for the main track.

RULES.

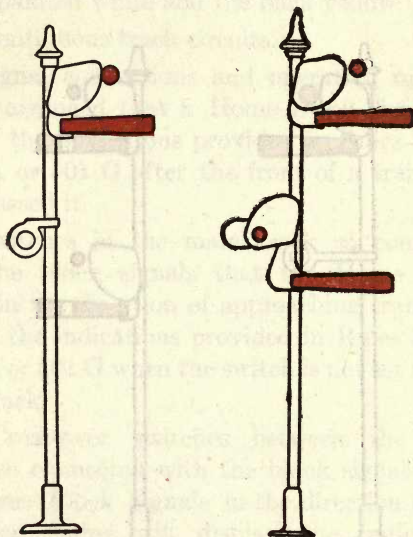
The aspects shown in the following rules are those mostly used. Other combinations of semaphores or combinations of semaphores and disc signals may be used.

THREE-POSITION BLOCK SIGNALS.



INDICATION — STOP.
NAME — STOP-SIGNAL.
501 A.

THREE-POSITION BLOCK SIGNALS.

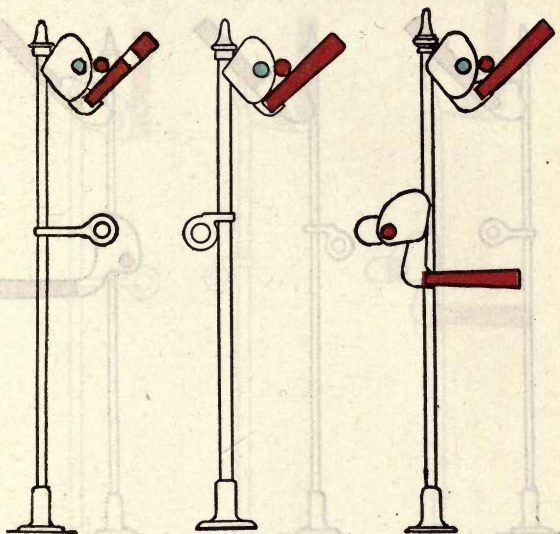


INDICATION — STOP; THEN PROCEED.

NAME — STOP AND PROCEED-SIGNAL.

501 AA.

THREE-POSITION BLOCK SIGNALS.

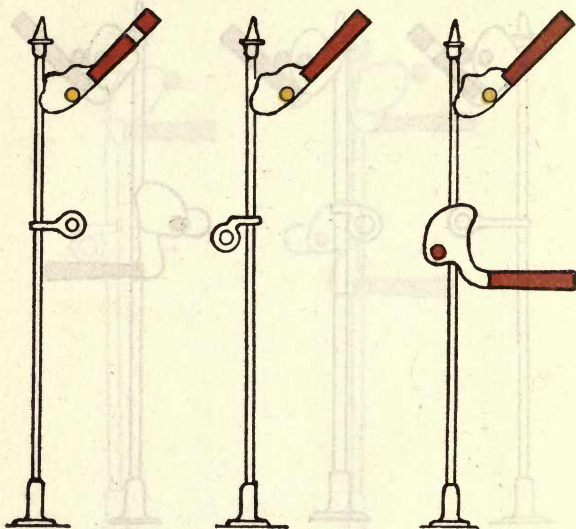


INDICATION — APPROACH NEXT SIGNAL PREPARED
TO STOP.

NAME — APPROACH-SIGNAL.

501 B.

THREE-POSITION BLOCK SIGNALS.

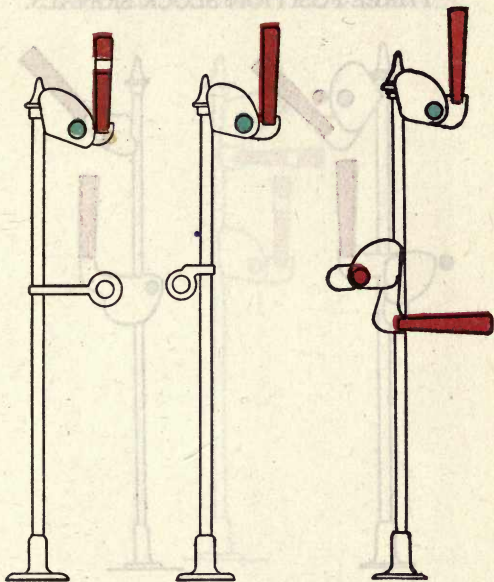


INDICATION—APPROACH NEXT SIGNAL
PREPARED TO STOP.

NAME—APPROACH SIGNAL

501 B.

THREE-POSITION BLOCK SIGNALS.

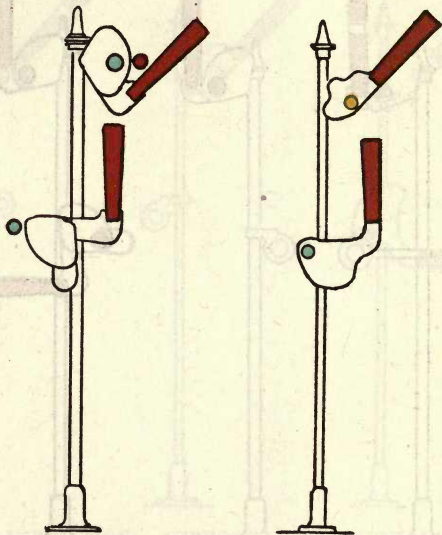


INDICATION — PROCEED.

NAME — CLEAR-SIGNAL.

501 C.

THREE-POSITION BLOCK SIGNALS.

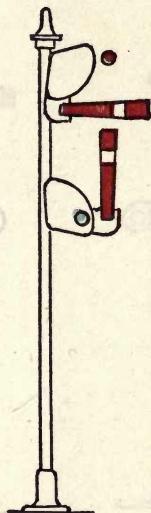


**INDICATION — APPROACH NEXT SIGNAL AT
RESTRICTED SPEED.**

NAME — APPROACH-RESTRICTING-SIGNAL.

501 E.

THREE-POSITION BLOCK SIGNALS.

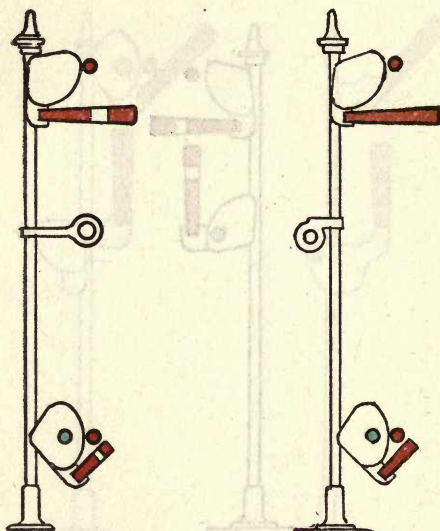


INDICATION — PROCEED AT RESTRICTED SPEED.

NAME — CLEAR-RESTRICTING-SIGNAL.

501 F.

THREE-POSITION BLOCK SIGNALS.

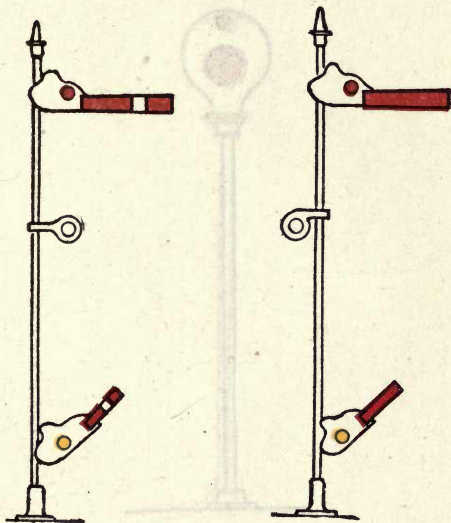


INDICATION — PROCEED AT SLOW SPEED PREPARED
TO STOP SHORT OF TRAIN OR OBSTRUCTION.

NAME — PERMISSIVE-SIGNAL.

501 G.

THREE-POSITION BLOCK SIGNALS.

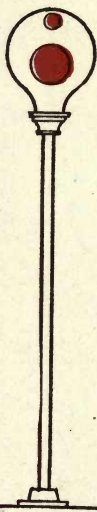


INDICATION—PROCEED AT SLOW SPEED PREPARED
TO STOP SHORT OF TRAIN OR OBSTRUCTION.

NAME—PERMISSIVE-SIGNAL.

501 G.

TWO-POSITION HOME BLOCK SIGNALS.

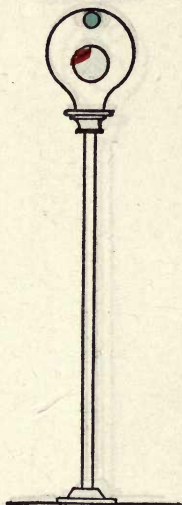


INDICATION — STOP; THEN PROCEED.

NAME — STOP AND PROCEED-SIGNAL.

502 A.A.

2. TWO-POSITION HOME BLOCK SIGNALS,

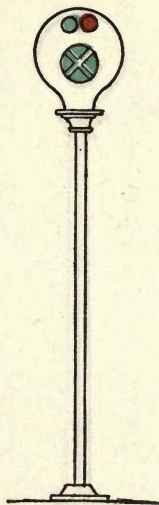


INDICATION — PROCEED.

NAME — CLEAR-SIGNAL.

502 C.

TWO-POSITION DISTANT BLOCK SIGNALS.



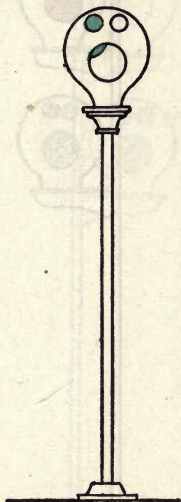
INDICATION — APPROACH HOME SIGNAL WITH
CAUTION.

NAME — CAUTION-SIGNAL.

503 J.

TWO-POSITION DISTANT BLOCK SIGNALS.

Automatic

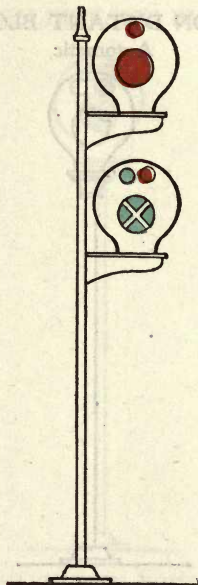


INDICATION — PROCEED.

NAME — CLEAR-SIGNAL.

503 K.

TWO-POSITION HOME AND DISTANT BLOCK
SIGNALS.

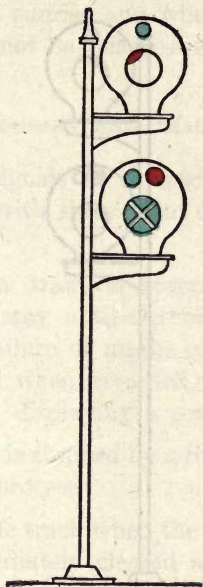


INDICATION — STOP; THEN PROCEED.

NAME — STOP AND PROCEED-SIGNAL.

504 AA.

**TWO-POSITION HOME AND DISTANT BLOCK
SIGNALS.**

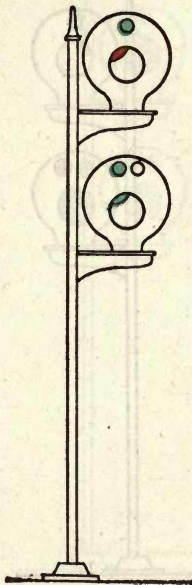


**INDICATION — APPROACH NEXT SIGNAL PREPARED
TO STOP.**

NAME — APPROACH-SIGNAL.

504 B.

TWO-POSITION HOME AND DISTANT BLOCK
SIGNALS.



INDICATION — PROCEED.

NAME — CLEAR-SIGNAL.

504 C.

505. Block signals govern the use of the blocks, but, unless otherwise provided, do not supersede the superiority of trains; nor dispense with the use or the observance of other signals whenever and wherever they may be required.

506. Lights must be used upon all block signals from sunset to sunrise and whenever the signal indications cannot be clearly seen without them.

ENGINEMEN AND TRAINMEN.

508. Block signals for a track apply only to trains moving with the current of traffic on that track.

509. When a train is stopped by a Stop-signal it must stay until authorized to proceed, or in case of failure of means of communication it may proceed when preceded by a flagman to the next signal displaying a proceed indication.

When a train is stopped by a Stop and Proceed-signal it may proceed:

(A.) On single track when the signal is cleared, or if not immediately cleared and except when train is proceeding under flag from last Stop-signal, it may proceed at once at slow speed expecting to find train in block, broken rail, obstruction or switch not properly set.

(B.) On two or more tracks at once at slow speed, expecting to find a train in the block, broken rail, obstruction or switch not properly set.

509c. When a train is stopped by a Stop signal on single track and authority to proceed is requested, before it is given by the Train Dispatcher, he will ascertain if there is any opposing train or yard engine movement which will affect that Stop signal. When assured that there is no such movement, authority will be issued to the train in the following form:

“You may proceed at slow speed expecting to find a broken rail, obstruction or switch not properly set.”

Should the Train Dispatcher not be able to assure himself that there is no opposing train or yard engine movement, authority to the train will be issued as follows:

“You may proceed under protection of flag to the first signal that indicates proceed.”

These instructions must be repeated by the conductor or engineman to insure correct understanding, and entry made in the Train Order Book.

510. When a train is stopped by a block signal which is evidently out of order, and not so indicated, the fact must be reported to the Chief Train Dispatcher.

510a. In reporting a signal out of order it will be done by its number.

510b. When a rail is broken in track which is bonded for track circuit the signal maintainer must be notified immediately so that he can restore normal conditions as soon as track is repaired.

511. Both switches of a cross-over must be open before a train starts to make a cross-over movement, and the movement must be completed before either switch is restored to normal position.

512. Where switch indicators are used, the indications displayed do not relieve enginemen and trainmen from protecting their train as required by the rules.

512a. A switch must not be opened to permit a train movement to a main track when the semaphore arm is horizontal or the disc is visible in the indicator box at the switch, except under protection as per Rule 99.

INTERLOCKING.

DEFINITIONS.

INTERLOCKING.—An arrangement of switch, lock and signal appliances so interconnected that their movements must succeed each other in a pre-determined order.

INTERLOCKING PLANT.—An assemblage of switch, lock and signal appliances, interlocked.

INTERLOCKING STATION.—A place from which an interlocking plant is operated.

FIXED SIGNAL.—A signal of fixed location indicating a condition affecting the movement of a train.

INTERLOCKING SIGNALS.—The fixed signals of an interlocking plant.

HOME SIGNAL.—A fixed signal at the entrance of a route or block to govern trains in entering and using said route or block.

DISTANT SIGNAL.—A fixed signal used in connection with one or more home signals to govern the approach thereto.

DWARF SIGNAL.—A low home signal.

REQUISITES OF INSTALLATION.

1. Signals of prescribed form, the indications given by not more than three positions; by lights of prescribed color; or by both.

2. The apparatus so constructed that the failure of any part controlling the operation of a signal will cause it to display its most restrictive indication.

3. Signals located preferably over or upon the right of and adjoining the track to which they refer.

3a. On double track the high signals, if practicable, will be located over or upon the left of and adjoining the track to which they refer.

4. Semaphore arms that govern, displayed to the right of the signal mast as seen from an approaching train.

4a. When one arm is used on an upper quadrant semaphore signal, a marker will be used placed below the arm and extending to the right of the signal mast. At night the marker will show a white light vertically below the upper light on a Stop signal and a red and green light vertically below on a Distant signal.

When two arms are used on an upper quadrant semaphore signal the lower semaphore casting will appear to the right of the signal mast on a Stop signal. At night the lower light will show vertically below the upper light.

5. The normal indication of Home Signals—Stop.

9. Latch locking, or its equivalent.

10. Interlocked levers, or their equivalent, by which switches, locks and signals are operated.

12. The interlocking of switches, locks, railroad crossings, drawbridges and signals through levers, or their equivalent.

13. Locks for all switches.

14. Detector bars, or their equivalent, for all interlocked switches.

15. Pipe, or its equivalent, compensated for changes in temperature, in mechanical interlocking, for connecting levers, with switches and locks.

16. The interlocking of signals with switches, locks, railroad crossings, or drawbridges, so that a signal permitting a train to proceed cannot be displayed unless the route to be used is set and Stop-signals displayed for all conflicting routes.

17. The established order of interlocking such that:

A signal permitting a train to proceed cannot be displayed until the switches in the route to be set are in position and locked; derails, if any, in conflicting routes set to diverge and all opposing

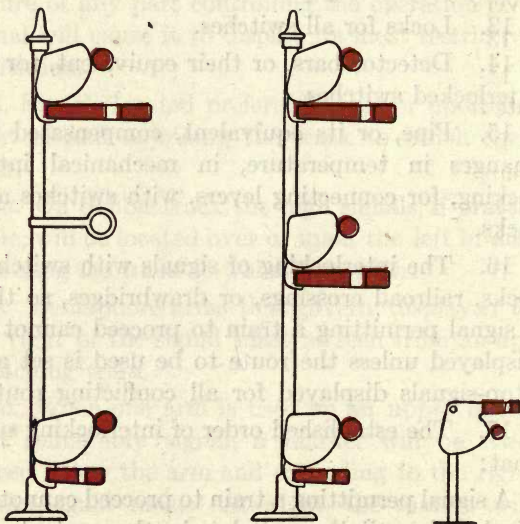
or conflicting signals display their most restrictive indication. The display of a signal to proceed shall lock the arrangement.

18. Interlocking and Block Signals, interconnected, where both are operated from the same station.

RULES.

The aspects shown in the following rules are those mostly used. Other combinations of semaphores or combinations of semaphores and disc signals may be used.

THREE-POSITION SIGNALS.

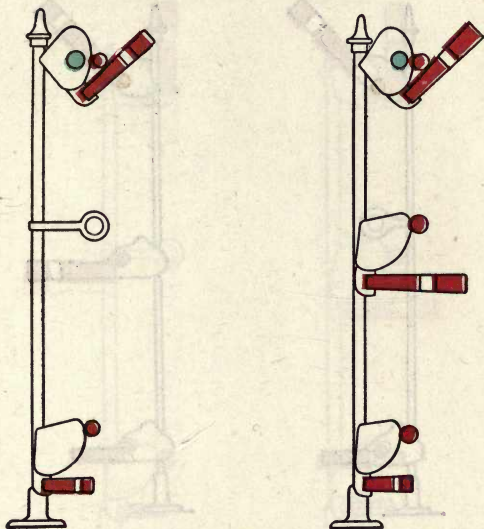


INDICATION—STOP.

NAME—STOP-SIGNAL.

601 A.

THREE-POSITION SIGNALS.

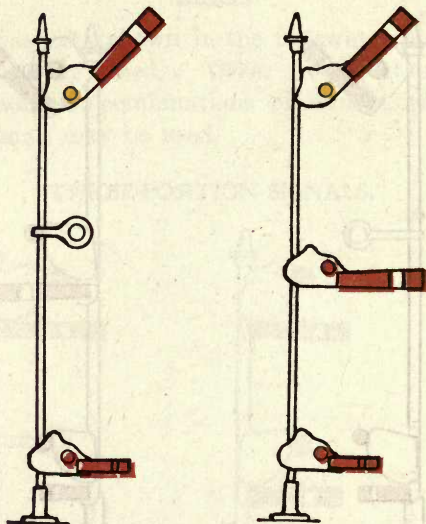


INDICATION—APPROACH NEXT SIGNAL PREPARED
TO STOP.

NAME—APPROACH-SIGNAL.

601B.

THREE-POSITION SIGNALS.

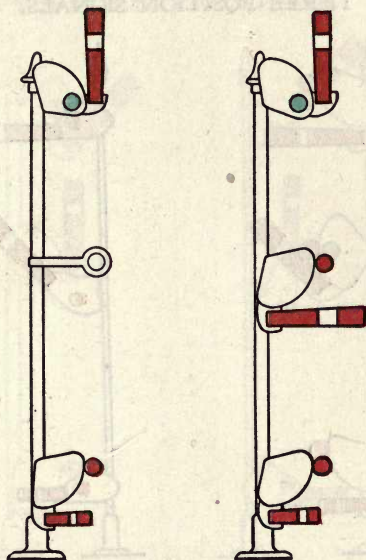


INDICATION—APPROACH NEXT SIGNAL
PREPARED TO STOP.

NAME—APPROACH-SIGNAL.

601 B.

THREE-POSITION SIGNALS.

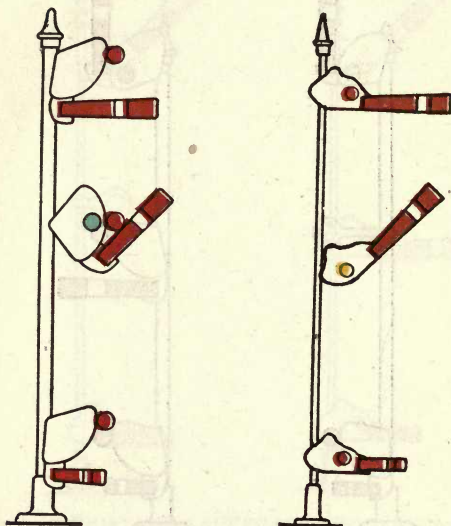


INDICATION—PROCEED.

NAME—CLEAR-SIGNAL.

601C.

THREE-POSITION SIGNALS.

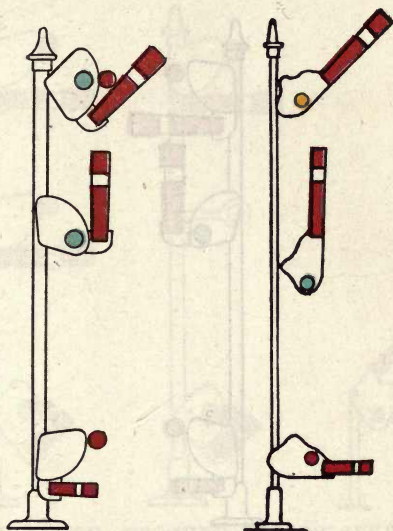


INDICATION—PROCEED AT RESTRICTED SPEED
PREPARED TO STOP AT NEXT SIGNAL.

NAME—RESTRICTING-SIGNAL.

601 D.

THREE-POSITION SIGNALS.

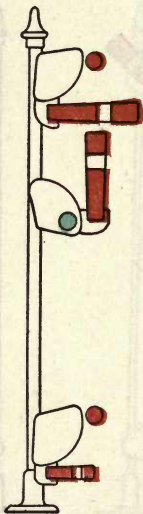


INDICATION—APPROACH NEXT SIGNAL AT RESTRICTED SPEED.

NAME—APPROACH-RESTRICTING-SIGNAL.

601 E.

THREE-POSITION SIGNALS.

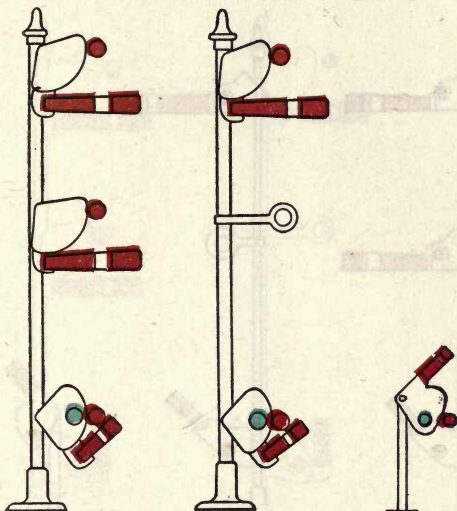


INDICATION—PROCEED AT RESTRICTED SPEED

NAME—CLEAR-RESTRICTING-SIGNAL.

601 F.

THREE-POSITION SIGNALS.

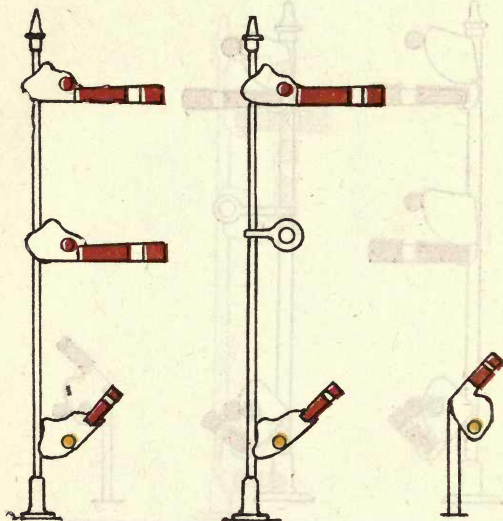


INDICATION—PROCEED AT SLOW SPEED
PREPARED TO STOP.

NAME—SLOW-SPEED-SIGNAL.

601 G.

THREE-POSITION SIGNALS.

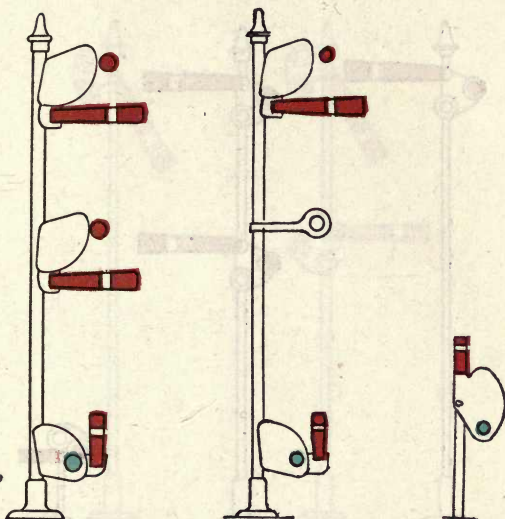


INDICATION—PROCEED AT SLOW SPEED
PREPARED TO STOP.

NAME—SLOW-SPEED-SIGNAL.

601 G.

THREE-POSITION SIGNALS.

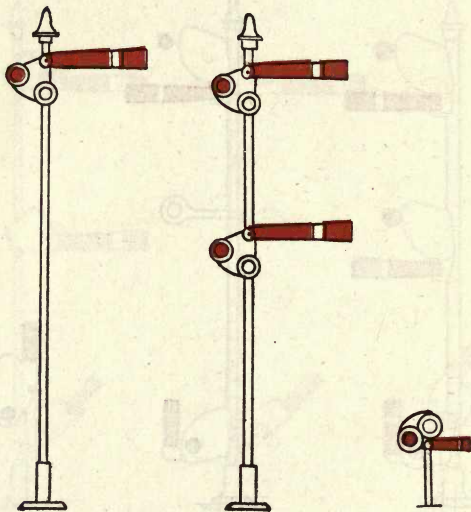


INDICATION—PROCEED AT SLOW SPEED

NAME—CLEAR-SLOW-SPEED-SIGNAL.

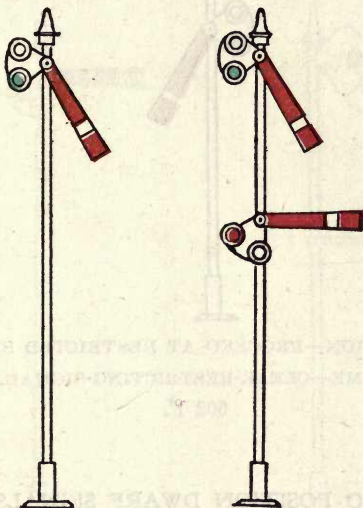
601 H

TWO-POSITION HOME SIGNALS.



INDICATION — STOP.
NAME — STOP-SIGNAL.
602 A.

TWO-POSITION HOME SIGNALS.

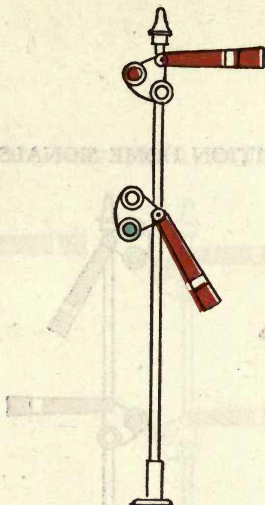


INDICATION — PROCEED.

NAME — CLEAR-SIGNAL.

602 C.

TWO-POSITION HOME SIGNALS.



INDICATION—PROCEED AT RESTRICTED SPEED.

NAME—CLEAR-RESTRICTING-SIGNAL.

602 F.

TWO-POSITION DWARF SIGNALS.

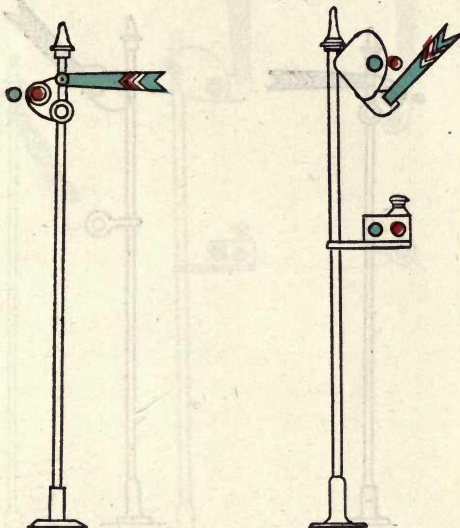


INDICATION—PROCEED AT SLOW SPEED
PREPARED TO STOP.

NAME—SLOW-SPEED-SIGNAL.

602 G.

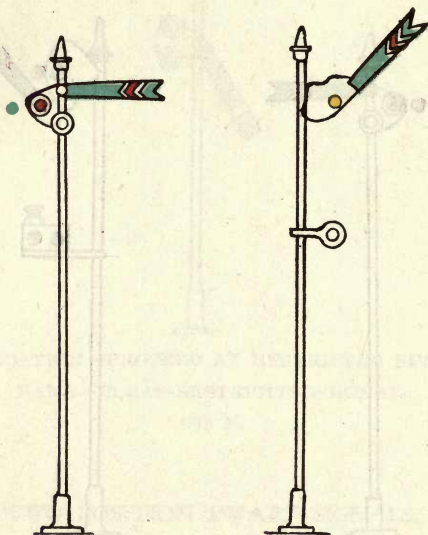
TWO-POSITION DISTANT SIGNALS.



INDICATION--APPROACH HOME SIGNAL WITH
CAUTION.

NAME--CAUTION-SIGNAL.
603 J.

TWO-POSITION DISTANT SIGNALS.

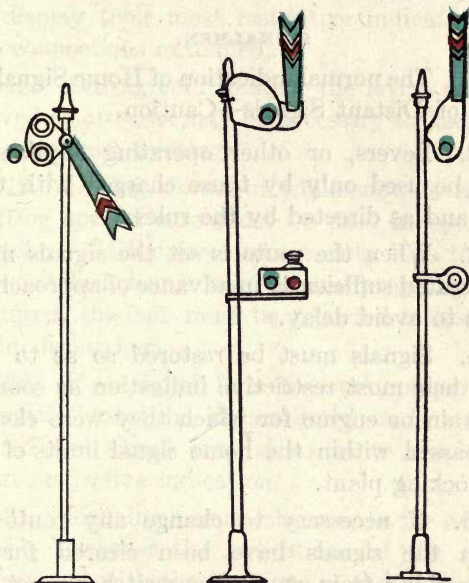


**INDICATION—APPROACH HOME SIGNAL
WITH CAUTION.**

NAME—CAUTION-SIGNAL.

603 J.

TWO-POSITION DISTANT SIGNALS.



INDICATION—PROCEED.

NAME—CLEAR-SIGNAL.

603 K.

605. Interlocking signals govern the use of the routes of an interlocking plant, and as to movements within Home signal limits, their indications supersede the superiority of trains, but do not dispense with the use or the observance of other signals whenever and wherever they may be required.

SIGNALMEN.

611. The normal indication of Home Signals—Stop; of Distant Signals—Caution.

612. Levers, or other operating appliances, must be used only by those charged with that duty and as directed by the rules.

613. When the route is set the signals must be operated sufficiently in advance of approaching trains to avoid delay.

614. Signals must be restored so as to display their most restrictive indication as soon as the train or engine for which they were cleared has passed within the home signal limits of the interlocking plant.

615. If necessary to change any route for which the signals have been cleared for an approaching train or engine, switches must not be changed or signals cleared for any conflicting route until the train or engine, for which the signals were first cleared, has stopped.

616. A switch, or lock, must not be moved when any portion of a train or an engine is standing on or closely approaching the switch, detector bar or circuit.

616a. A route must not be changed when a car or engine is standing inside of the home or dwarf signals of that route.

617. Levers must be operated carefully and with a uniform movement. If any irregularity, indicating disarranged connections, is detected in their working, the signals must be restored so as to display their most restrictive indication and the connections examined.

618. During cold weather the levers must be moved as often as may be necessary to keep connections from freezing.

619. During storms or while snow or sand is drifting special care must be used in operating switches. If the force whose duty it is to keep the switches clear is not on hand promptly when required, the fact must be reported to the chief train dispatcher.

620. If a signal fails to work properly its operation must be discontinued and until repaired the signal secured so as to display its most restrictive indication.

621. Signalmen must observe, as far as practicable, whether the indications of the signals correspond with the positions of the levers.

622. Signalmen must not make nor permit any unauthorized repairs, alterations or additions to the plant.

Any defects in the interlocking plant must be promptly reported to the chief train dispatcher and the interlocking repairman and only duly authorized persons permitted to make repairs.

623. If there is a derailment or if a switch is run through, or if any damage occurs to the track or interlocking plant, the signals must be restored so as to display their most restrictive indication, and no train or switching movement permitted until all parts of the interlocking plant and track liable to consequent injury have been examined and are known to be in a safe condition.

624. If necessary to disconnect a switch, derail, detector bar or its equivalent, or a lock, all switches or derails affected must be safely secured.

625. When switches or signals are undergoing repairs, signals must not be displayed for any movements which may be affected by such repairs, until it has been ascertained from the repairmen that the switches are properly set for such movements.

625a. When any part of an interlocking plant essential to the safe operation of a train at normal speed is defective or out of order, the Stop Signals must be held at the Stop position until the train stops, and then, if movement can be made with safety, a signal to proceed may be given. This practice must continue until repairs are made and the plant is in good order.

626. Signalmen must observe all passing trains and note whether they are complete and in order; should there be any indication of conditions endangering the train, or any other train, the signalman must take such measures for the protection of trains as may be practicable.

627. If a signalman has information that an approaching train has parted he must, if possible, stop trains or engines on conflicting routes, clear the route for the parted train, and give the Train-parted signal to the engineman.

628. Signalmen must have the proper appliances for hand signaling ready for immediate use. Hand signals must not be used when the proper indication can be displayed by the interlocking signals. When hand signals are necessary they must be given from such a place and in such a way that there can be no misunderstanding on the part of enginemen or trainmen as to the signals, or as to the train or engine for which they are given.

629. If necessary to discontinue the use of any interlocking signal, hand signals must be used and the chief train dispatcher and interlocking repairman notified.

629a. When necessary to use hand signals to proceed, the route must be known to be properly set up and the train come to a stop before the signal is given.

630. Signalmen will be held responsible for the care of the interlocking station, lamps and supplies; and, unless otherwise provided, of the interlocking plant.

631. Lights in interlocking stations must be so placed that they cannot be seen from approaching trains.

632. Lights must be used upon all interlocking signals from sunset to sunrise and whenever the

signal indications cannot be clearly seen without them.

633. If a train or engine overruns a Stop-signal the fact must be reported to the chief train dispatcher, also on the daily interlocking report.

634. Signalmen must not permit unauthorized persons to enter the interlocking station.

ENGINEMEN AND TRAINMEN.

661. If a signal, permitting a train to proceed, after being accepted, is changed to a Stop-signal before it is reached, the stop must be made at once. Such occurrence must be reported to the chief train dispatcher.

662. Trains or engines must not pass a signal indicating stop, except as provided in Rule 663.

663. Trains or engines must not proceed on hand signals as against interlocking signals until engine-men and trainmen are fully informed of the situation and know that it is safe to proceed.

663a. Trainmen must not give a proceed signal against interlocking signals that are in operation.

663b. Engine-men and trainmen must bring their train to a stop at a fixed signal indicating Stop, also at the Stop signal of an interlocking plant reported out of service, before accepting a hand signal.

663c. When a train is stopped by a signal without apparent cause, trainman or engine-man will at once ascertain the cause from signalman.

664. The engineman of a train which has parted must sound the whistle signal for Train-parted on approaching an interlocking plant.

665. An engineman receiving a Train-parted signal from a signalman must answer by the whistle signal for Train-parted.

666. When a parted train has been re-coupled the signalman must be notified.

667. Sand must not be used over movable parts of an interlocking plant.

667a. In freezing weather overflow from injectors must not be permitted over movable parts of an interlocking plant.

668. Conductors, or enginemen of yard engines, must report to the chief train dispatcher any unusual detention at interlocking plants.

669. Trains or engines stopped by the signalman in making a movement through an interlocking plant, must not move in either direction until they have received the proper signal from him.

670. A reverse movement within the limits of an interlocking plant, or a forward movement after making a reverse movement, must not be made without the proper interlocking signal or permission from the signalman.

SIGNAL REPAIRMEN.

681. Repairmen are responsible for the inspection, adjustment and proper maintenance of all the interlocking plants assigned to their care.

682. When the condition of switches or track does not admit of the proper operation or maintenance of the interlocking plant, the fact must be reported to the division superintendent and supervisor of signals or division engineer.

683. When any part of an interlocking plant is to be repaired a thorough understanding must first be had with the signalman, in order to secure the safe movement of trains and engines during repairs. The signalman must be notified when the repairs are completed.

684. If necessary to disconnect a switch, derail, detector bar or its equivalent, or a lock, all switches or derails affected must be safely secured before any train or engine is permitted to pass over them.

685. Alterations or additions to an interlocking plant must not be made unless authorized by the signal engineer.

RULES FOR EMPLOYES IN GENERAL.

NOTICE.

In addition to the rules under this heading, all employees of the operating department must provide themselves with the rules, regulations and instructions issued by other departments which affect their duties, be thoroughly conversant and comply therewith.

RULES FOR EMPLOYEES IN GENERAL.

700. All employes should promote safety of trains and the good service of the company by all means in their power; reporting any defects in signals, track, bridges or equipment, or any improper conduct of employes. Reporting defects.

In double track districts, train employes should observe trains on the opposite track and note hot journal bearings, loose doors, or anything protruding that would be liable to strike a train on opposite track, and if they observe anything out of order they should notify the men upon the train by proper signal, and the chief train dispatcher when practicable; they should always observe track men and other employes, as they pass, and be watchful for signals from them.

701. In case of accident to train, a thorough inspection must be made at once for any possible defect in track or damage to roadway. No movement must be permitted until conditions are known to be safe for passage of trains. If a conductor or engineman discovers anything wrong with the track, bridges, or culverts, which would be likely to cause an accident to a following train, protection must be given by a flagman, the section men called, and the chief train dispatcher notified by wire. Roadway inspection.

702. Conductors and enginemen must report switches found out of order or misplaced. Report switches misplaced.

703. Turn-tables must be kept locked, except while being used or in immediate charge of employes. When found unlocked, or table or lock Turn-tables locked.

out of order, the fact must be reported at once to the chief train dispatcher by wire.

Fire near
track.
Stock
on track.
Wires down.

704. When fires occur on or near the right of way that are likely to cause damage to property, when fences are down or stock is discovered on the right of way, when the line wires are down or otherwise in disorder, conductors and enginemen under whose observation such incidents may come will report them to the chief train dispatcher from the first station and will stop and notify the first section man seen. In dry and windy weather engines must be watched carefully to prevent setting fire.

Severe
storms.

705. Station agents, operators and watchmen must report immediately by wire to the chief train dispatcher severe rainstorm, high wind or sudden rise of streams in their vicinity, and must see that the section foreman is on hand with his men to protect the track from damage. They must see that cars have not been moved by the wind to endanger the passage of trains, and remain on duty under the above circumstances until excused. If the train dispatcher's office cannot be reached the roadmaster must be notified, if possible, and all trains in the vicinity of the storm or danger notified.

High water.

706. Train dispatchers, agents and operators, in cases of severe storm or high water likely to endanger the track or safety of trains will notify such trains to be under full control within the limits of the storm; keep the roadmaster and foreman of bridges and buildings advised and will

require the section foreman to inspect and report the condition of track at once.

In case of threatened storm the train dispatcher will obtain frequent weather reports.

707. Conductors, train baggagemen, brake-men, enginemen, firemen, yardmen, train dispatchers, operators, interlocking levermen, signal foremen, maintainers and repairmen, section foremen and bridge foremen must pass an examination on the book of operating rules. Examinations.

708. No person suspended or dismissed from one department or division of the service shall be employed in another without the consent of the head of the department or division from which he was dismissed. Re-employment.

709. No employe will be permitted to be absent from duty or to change places with another without obtaining permission from proper authority. Absence from duty.

710. Necessary keys will be furnished to such employes as require them; they must be receipted for on the proper form. Keys.

711. When an employe leaves the service, all equipment supplied by the company must be returned. Leave the service.

712. Standing upon the footboards of engines in motion while coupling to cars, going between cars, or any car and engine while in motion, or walking directly in front of a moving car or engine for any purpose, or standing between the rails Stand on foot boards of engines.

and getting on an approaching car or engine, or pushing over draw bars of moving cars or engines for any purpose whatsoever, is prohibited.

Dangerous practices.

713. Stepping upon the front of approaching engines, jumping on or off cars or engines moving rapidly and all similar practices are dangerous, unnecessary, and are prohibited.

Ride on pilot of engine.

714. No person will be permitted to ride upon the pilot or pilot step of an engine, either in the discharge of duty or otherwise.

Riding cars and switching.

715. Only trainmen or switchmen may be permitted to ride cars or in any way assist in switching trains on the road or at terminals.

Cars occupied by laborers.

716. Work trains must not be run with engine pushing cars occupied by laborers, except when absolutely necessary, and must then move with caution, prepared to stop short of any obstruction.

Supplies.

717. Conductors must know at all times, that their trains are provided with everything necessary for them to comply with the rules of the company.

Acquainted with road.

718. Conductors and enginemen called for service requiring a movement over any division or sub-division of road, the physical characteristics of, or the special time table rules governing which they are not fully acquainted with, must notify the Chief Train Dispatcher by wire and receive instructions before accepting the run.

Trains detoured.

719. When trains of foreign roads are detoured over the C. & N. W. railroad a pilot engineman, also pilot conductor, must in every instance be provided. When C. & N. W. trains

are to be detoured over foreign railroads, an engineman pilot and conductor pilot will be requested to be furnished.

720. A train must not be unnecessarily delayed after train orders permitting it to proceed have been received. The train dispatcher should be notified of anticipated delays. Unnecessary delays.

721. Conductors and brakemen of freight trains must station themselves where signals or conditions that may affect the movement of their train can be observed and will exchange signals passing through all stations. When approaching points where train is required to stop and on long descending grades where retainers are used, brakemen must be on top of train in position to observe signals and assist in stopping train should emergency require. Enginemen and firemen must keep watch for signals from trainmen at all times and must obtain a signal to proceed, to be given by conductor or trainman at the rear of the train after all switches at a station have been passed, this signal to be acknowledged by Whistle Signal 14(g). Trainmen stationed to observe signals. So far as practicable, when approaching highway crossings and streets at grade, around obscure curves and through all stations, both enginemen and firemen, also all other employes who may be on the engine, must be on the lookout to prevent injury to persons or damage to vehicles. Alarm whistle must be sounded to insure attention of all pedestrians and vehicle occupants adjacent to, or about to cross the tracks.

Transfer
men sta-
tioned to
observe
signals.

722. Brakemen and yardmen in freight transfer service in terminal districts must so station themselves as to be in position to observe signals or conditions that may affect the movement of their train. While moving through yards, railroad crossings, interlocking plants, draw bridges and points where there is frequent train movement, they must be in position to assist in stopping or protecting train should emergency require. Enginemen and firemen must keep watch for signals at all times and co-operate with trainmen.

Flagman
familiar
with rules.

723. Conductors must never intrust the duties of a flagman to any one not entirely familiar with the rules, except in emergency, and then give the fullest instructions that circumstances will permit.

Switching
at station.

724. At stations such switching as may be required by the agent will be done. Cars will be left convenient for loading and unloading.

Cars secure
and to
clear main.

See that cars left on tracks are properly secured, clear of the main track and so they will clear a man riding on side of car on an adjoining track. If a car is set out without a brake, the wheels must be securely blocked.

Cars
away from
highway
crossing.

In leaving cars they will be left as far from public crossings as conditions will permit so that persons using crossing may have the best possible view of approaching trains. In no case must cars be left projecting over line of public crossings.

When necessary to cut a train to open a public crossing cars should not be left within 50 feet of either side of the crossing when practicable. Opening crossing.

725. Conductors will unload way freight on the platform of the freight house, or at such other places as the agent may designate. Unload freight.

When freight is discovered damaged or pilfered, whether unloaded by employes or others, it must be reported to the Superintendent. Damaged and pilfered freight.

Freight must not be unloaded from a train on which passengers are carried, while it is in motion.

726. No part of a train shall be left standing on a railroad crossing or interlocking plant so as to interfere with other movements if it can be avoided. Not to block R. R. crossing or interlocking.

727. Switches must be set for the dead rails over track scales when scales are not in use. Engines must not be run over the weighing rails, and cars only when being weighed. Switches set for dead rails.

728. Agents, yardmen and trainmen will give special attention to facilitating car inspection, the proper placing of cars needing repairs, and the transferring of freight liable to delay. When necessary to disturb cars that are being loaded or unloaded, ample warning must be given and cars must not be moved while persons are in or about them. Such cars when moved must be replaced in the same position. Car inspection.

729. Cars or tanks containing oil or other inflammable substances must in no case be placed next to the engine or the caboose when there are other cars in the train; they should be ten cars Placing cars in trains.

from the engine or caboose when it can be done. Wooden platform or flat cars empty or with less than 15,000 pounds of load must be placed next to the caboose when practicable; but in trains carrying passengers, flat cars loaded with logs, piling, poles or timber must, when possible, be placed and hauled in trains at least five cars ahead of the caboose. Cars loaded with live poultry or stock will be placed as near the caboose as the make-up of the train will permit. A careful examination must be made of doors, locks and fastenings, and cars must not be moved until properly secured. Every facility must be rendered parties in charge for proper examination and care of their stock, notifying attendants when train is expected to stop, and a sufficient length of time allowed to afford them an opportunity to examine it. When stock gets down, the car will be left, at request of attendant, at any station. Place cars at chute convenient for party in charge to unload, and during hot weather shower such stock as may require it, except when requested not to do so by the party in charge.

Car doors
closed.

730. The doors of freight cars must be kept closed when not in use. When either loaded or empty cars are placed in a train it is the duty of Conductors and Car Inspectors to know that the doors are properly closed and securely fastened by the regular fixtures.

When box cars containing perishable freight or stock necessary to have ventilation from side

doors are placed in a train, these doors may be left partially open, but securely fastened so as to prevent their being moved in either direction. Such cars must be frequently inspected enroute and know that doors are secured.

Doors must not be nailed or otherwise irregularly attached to the car, except in cases of emergency; under such circumstances they must be carefully watched to prevent them from becoming loosened and striking passing trains, and permanent repairs must be made at the first car repairing station.

731. Great care should be taken to prevent injury to live stock. Trains must come to a stop, if necessary, to avoid doing so. When an accident to live stock occurs, the conductor and engineman must report to the superintendent, as soon thereafter as possible, on form 1207. Care of live stock.

732. Passengers, including employes not on duty, must not be carried on freight trains without proper authority. Persons accompanying live stock or perishable freight, for the purpose of taking care of it, will, on presentation of proper transportation, be allowed to ride on the same train with it, but in the caboose only, except when with race-horses, they may be allowed to ride in same car. Passengers on freight trains.

733. Freight trains scheduled to carry passengers will be particular to have the caboose stop at the depot platform to receive and discharge them. Before the arrival of train at any station where they stop, the conductor will distinctly call out the name of station. Stop caboose at platform.

Piling
material.

734. Station, track and other employes must see that material stored along the track and at stations is neatly piled, and the right of way and station grounds kept in tidy condition. Material must not be piled or stored within six feet of nearest rail, either main or side track, or any building, shed, platform or other structure erected closer than six feet from the track without authority from the proper officers.

Obstructions.

Employes should report to their superiors, all overhead, side or under foot obstructions, so that same can be removed.

Car
economy.

735. Care must be taken to economize in the use of cars, small lots of freight being loaded into cars in passing trains. Exception may be made in case of perishable freight when passing trains have no room for it.

Legal
instructions.

736. Legal proceedings against the Company are of various kinds, such as actions to recover money judgments, actions to compel the Company or its agents to perform some legal duty, garnishee cases, attachment cases, replevin cases, special assessments for street paving, sidewalk construction and the like, and ditch and drainage cases.

Summons.

All of these proceedings are commenced by summons, or some kind of notice, and these summons or notices are either served upon the agents of the Company by an officer or some individual, or they are served by publication of the summons or notice in local newspapers.

It is important that the Law Department, which is responsible for the conduct of legal proceedings, be notified of the commencement of any legal proceeding at the earliest possible moment, and in communicating with the Law Department you will please address the General Counsel, at Chicago, Illinois.

Because many legal proceedings are commenced by publication of notice in local newspapers, as above stated, it is important that you should look over the publications in your local papers, and if you observe any notice in which this Company is named, or which in any way relates to the property of this Company, its stations, station grounds, right of way, or the like, cut it out at once, and send it immediately to the General Counsel, giving name and date of newspaper.

Whenever any summons or any formal notice or document is served upon you, notify General Counsel, General Offices, Chicago, at once, by telegraph, stating the nature of the document, if possible.

Note on the document left with you, whatever it be, the date and hour when you received it,

Transmit all such documents to the General Counsel by the first train. If you know anything about any facts relating to the matter, send statement with papers.

In garnishee cases advise the General Counsel by wire of the service of the papers, the name and occupation of the employe, and whether married or single, if you know.

Also notify at once by wire your Division Superintendent, the paymaster, and the employe garnisheed, if known to you.

You will send the garnishee papers served upon you to the General Counsel by first train, as above requested. Note time and amount of fees received by you from officer.

When property in the possession of the Company (that is, any property upon Company premises, in cars, depots, warehouses or station grounds, and the like), is attached, replevied or levied upon (that is, when any officer with any writ or document proposes to take possession of any such property), notify the General Counsel immediately by wire of the fact and give the name and address of the consignor and consignee, place of shipment and destination of property, and date and number of way-bill. If the property attached, replevied or levied upon is baggage, notify the General Counsel of number and kind of check, destination of baggage and name and address of owner.

In all cases, when a copy of the document is not given to you, request copy of the officer.

In all of this class of matters, do not waive anything or consent to anything,

If an officer attempts to attach, levy upon or take away any property, do not interfere with him or attempt to prevent him; at the same time, do not formally consent.

Under no circumstances are you obliged to unlock any door at the request of any officer,

unless he has what is known as a search warrant, which he will exhibit to you.

Do not sign any admission of service on any summons, document or other paper.

Please remember that these instructions include all notices served upon you, and they are to be sent directly to the General Counsel and not through any other official. It will be your duty, also, to send to the General Counsel all notices which may affect the Company, like ordinances, special assessments, ditch and drainage proceedings, etc., which are published in your county papers. If you are subpoenaed as witness in a case in which the Company may be interested, and particularly when you are required to take any Company books or records into court, notify the General Counsel by wire, giving all the information you can. This does not apply, of course, when you are called by the Company. In any legal matter you are always at liberty to ask advice from the General Counsel, and in cases of doubt it is your duty.

Notice served.

Subpoenaes.

737. Persons whose duties do not require their actual presence there will not be permitted to enter telegraph, telephone or ticket offices, interlocking stations, baggage cars, baggage rooms or similar places.

Permitted in office.

738. The use of the telegraph and telephone must be restricted to company's business to which an immediate answer or a saving of time is of importance. Messages must be brief.

Wire service brief.

Solicitors.

739. Station agents or conductors will not permit hotel representatives or other unauthorized persons to solicit business or distribute advertising matter or beggars to solicit alms. Gambling is forbidden.

Irresponsible persons.

740. Persons not in condition to care for themselves must not be admitted to, nor carried on trains unless accompanied by a competent person in charge.

Consult legal department.

741. No agent or employe shall, acting for the company, procure a warrant for the arrest or cause the arrest of any person charged with an offense without first consulting either the law or claim department and obtaining the necessary authority.

Reading on duty.

742. Reading newspapers, books or periodicals, or the playing of games by enginemen, trainmen, signalmen, watchmen and crossing flagmen while on duty is forbidden.

Opening floor valves.

743. On approaching the final terminal point of a train, the front trainman of a passenger train will pass through the train from the rear end towards the forward end, opening floor valves, and after floor valves have been opened he will, on trains having generator in forward car, notify the electrician in charge of lighting plant, who will shut off the steam from the train line. On trains not having generator in forward car signal the engineman by 16 (l), and engineman will answer by 14 (g), and will shut off steam heat supply from the engine.

744. Cars must be loaded in accordance with the loading rules of the Master Car Builders' Association, which are revised and issued frequently. Loading cars.

INSTRUCTIONS IN CASE OF ACCIDENTS.

800. Whenever passengers or employees are injured see that everything is done to care for them properly, no matter how slight the wound or eye injury, to prevent infection; applying the "first aid" package treatment when available, calling the Company's surgeon to treat them, or, if prudent, move to the nearest place at which the company has a surgeon, and leave them with such surgeon for care and treatment. Surgical attendance.

If the injury be serious call the nearest competent surgeon obtainable to attend until the company's surgeon arrives.

801. Whenever an accident happens to any train on which passengers are carried, after everything has been made safe the conductor must give his undivided attention to the care and comfort of all, especially to those who are injured. Any assistance, article or facility necessary for this purpose may be obtained where available, a record being kept of same. A sufficient number of competent surgeons in the vicinity should be called to care for the injured. The company's surgeons in the vicinity should be notified to come immediately to the place of accident. The conductor must take the name and address of, Care of injured.

every person on the train, and, if possible ascertain from passengers what injury if any they received, noting it opposite his or her name, on form 1010.

Trespassers
hurt.

802. When persons (other than employes) by reason of climbing on or jumping from moving trains, or walking or lying on the track, or are otherwise injured, they should be sent to their homes or placed in charge of the local city, village or township authorities and no expense incurred on the part of the company in the matter.

Wire report.

803. A report of all accidents must be sent immediately to the superintendent or his assistant by the conductor, engineman, agent, yardmaster, foreman or person in charge, by wire, using form 1108, giving the names of the injured persons and witnesses, the extent of injuries and the names of the owners of the property damaged and the extent of damage, and as soon as possible a full and detailed report made on form 148 and forwarded to the superintendent or his assistant, also to the general claim agent, a separate report being made for each person injured. If the person injured is an employe he should also make and sign a statement of facts in relation to the accident in his own handwriting on the same form; should he be unable to write, the statement should be written at his dictation, and after being read over to him, he should sign it by making his mark, the person writing and reading statement signing same as a witness.

Employes
injured.

Witnesses.

804. Whenever an employe, whether on duty or not, witnesses an accident in which a person is

injured or property damaged, in which the company is in any way concerned, he must report it immediately on form 148. Every effort must be made to procure the names and addresses of all persons, particularly outsiders, who witnessed the accident, especially when persons are injured within the corporate limits of any city, town or village, or when crossing the tracks at a public highway.

805. When an accident occurs on an engine, or is caused by an engine striking any person, or conveyance, or when cars are being coupled or uncoupled, a full report must be made by the engineman on form 148, as well as by the conductor or the person in charge of the train. Engineman's report.

806. When persons are injured while coupling or uncoupling cars or in getting on or off cars, whether passenger or freight, or in any other way in which the accident may have been caused by defective appliances or machinery, the cars or appliances must be immediately examined by the person in charge or by the agent, to ascertain their condition, and report made of the inspection on form 751, giving the numbers and initials of cars examined and the names of the persons making the inspection. The superintendent or his assistant will then notify the inspector at the first division terminal, who will also examine the machinery, cars or appliances, and make report on same form. When an accident is caused by defective machinery or by the breaking of machinery, tools, appliances or rails, the broken Coupling or defective machinery.

or defective parts must be so marked as to be readily identified and immediately turned over to the superintendent or his assistant and by him forwarded to the general claim agent.

Accidents.

In case of an accident resulting from failure, from any cause, of a locomotive boiler or any of its appurtenances which causes injured employe to lose more than three days' time, general claim agent must be immediately notified by wire.

Death.

807. When an accident occurs which results in the death of any person, the remains of the deceased must be immediately picked up and carefully conveyed to the nearest station building, care being taken not to remove the body outside the limits of county and state in which the accident happened. The agent at such station will then notify the superintendent by wire, as well as the family or friends of the deceased.

OPERATORS.

**Appointing
operators.**

810. Operators will be appointed by the chief train dispatcher in his capacity as chief operator under authority of the superintendent of telegraph.

**Operators
report to.**

They will report to and receive their orders from the chief train dispatcher, and will comply with the instructions of the superintendent of telegraph; also of the head of the office in which they are employed, except when they conflict with other instructions.

811. They are required to be constantly on duty during the hours assigned, unless excused by the train dispatcher. Except in emergency cases, they will not be allowed to remain on duty a longer time than that prescribed by law. Unless relieved by another, operators will be excused by the train dispatcher.

When
on duty.

When relieving each other, they must make a transfer on a blank form provided for the purpose, of all orders that are not fully executed, and must see that the relieving operator fully understands them.

Transfer.

812. Under no circumstances should an operator accept a train order for a train of which he has the least doubt as to whether it has passed his station, unless instructed to do so by the train dispatcher, who has knowledge that the train has not passed.

Orders after
train passed.

813. In offices where more than one operator is on duty at the same time, but one operator will be permitted to handle train orders and clear trains.

But one
to handle
orders.

814. In closing an office, cut out all instruments at the switchboard, exercising care not to cross the wires. The address of an operator must be kept posted in the bill box or elsewhere as directed, showing where he can be found.

Closing
office.

815. Keep a register of the arrival and departure of all trains and report same to the train dispatcher; report the weather as required, and when any sudden change or heavy storm, make a special report.

Train
register.

Adjusting
instruments.

816. Use great care in adjusting instruments at all times especially in bad weather; never open the key unless positive that wire is not being used. Contention for circuit will not be allowed.

Commercial
telegraphy.

817. At all offices where arrangement has been made for the handling of public telegraph business, operators will be held accountable for the prompt and proper handling and reporting of such business in conformity with the requirements of the telegraph company, and which they must understand, and will carry out the instructions of the superintendent of telegraph with regard to same.

Condition
of office
and in-
struments.

818. See that the offices are kept in a neat and orderly condition; instruments clean and in good working order, and not take them apart or alter the arrangement of the wires, tables and appurtenances, without permission of the superintendent of telegraph, and notify him when repairs are needed.

Testing
wires.

819. If the line fails, each operator must at once test the wires and report, if possible, on which side of his office the failure is. In case of any trouble on them, they will quickly look for its whereabouts and be sure that it is not in their offices. The use of ground wires is strictly prohibited, except to test wires or in case of emergency.

Duties.

820. They must invariably sign their office call when using the line for any purpose whatever. It is the duty of operators to promptly discover and remedy inside office troubles caused by open keys, loose connections, etc. They must know

that the ground wires are in good condition, examine switchboards, keys, instruments and batteries each day, and know that all binding screws are tight, all connections good and properly made, and that paper or other inflammable matter is kept from the vicinity of wires and switchboards. They must familiarize themselves with switchboards and cutouts, so that they can properly switch wires in testing, see that wires are properly labeled on the switchboard and cooperate with the party testing wires, assisting in every way possible to clear wire trouble.

821. They must be courteous in their inter-Courtesy. course with persons transacting business at their offices, and over the wires. They will not receive messages to be transmitted free unless signed by an officer, agent or employe, or a reply to same.

822. Preserve messages sent and promptly Preserve messages. deliver those received, consider all messages confidential, and not permit them to be read by any person except those to whom they are addressed, nor make their contents the subject of conversation or remarks.

823. All messages not relating to the business Paid for. of the Company must be paid for, unless otherwise ordered by the proper authority.

824. Railroad messages, after being trans-Filing messages. mitted, must be filed daily, and preserved until otherwise ordered.

A separate file must be kept of copies of all Preserve copy of orders. train orders and forms used for train movement and preserved until otherwise ordered.

Delivery of
messages.

825. Messages received for delivery to a general officer enroute, must be enclosed in an envelope, sealed and addressed.

Instruments
used.

826. All instruments will be furnished by the company, and no private instrument will be allowed on the wires. No private lines must be connected with the offices or buildings without permission of the superintendent of telegraph.

Use of
wires.

827. The wires are not to be used for the transmission of communications which may be sent by train without detriment to the company's interests, and operators should report any such cases observed.

Standard
time.

828. Standard time will be sent from 9:57 a. m. until 10 a. m. daily, and has absolute right to the circuit.

Breaking in upon the circuit while time is being sent is positively prohibited, and operators must be sure that their instruments are properly adjusted.

Telegraph
students.

829. Telegraph students will not be permitted to receive or forward messages except in the presence of the regular operator, and under his direction. The attention of students must be directed to the rules of the company, and particularly those relating to the privacy of telegrams.

Promptness
enjoined.

830. There must be no delay in obtaining answer to messages. If a reply cannot be had in reasonable time, the sending office must be promptly notified the reason.

TELEGRAPH NUMERALS.

1. Wait a minute.
4. Where shall I go ahead?
5. Have you any business for me?
8. You are breaking. Close your key.
9. Conditions requiring immediate action.
18. What is the matter?
- 19 or 31. Signal for train orders.
23. Messages for all offices.
25. Busy on other lines.
86. Division Superintendent or Superintendent of Telegraph.
92. Deliver quickly.
96. President, General Manager or General Superintendent.
134. Who is at the key?

The usual abbreviations for the names of the months and stations.

The circuit may be secured by any of the following signals, which take precedence in the order named:—"96," "86," "9," "Line," "19" and "31."

Right of signals to circuit.

LINE REPAIRERS.

840. Line repairers report to and receive instructions from the superintendent of telegraph but will comply with the instructions of the chief train dispatcher.

Report to.

They must always be provided with a full set of tools suitable for their work and be ready to respond immediately to any orders they may receive.

Tools.

Report each morning the part of the road on which they expect to be during the day.

Examination.

They will go over their respective districts frequently, examine any office they may be at, and see that the rules are being complied with.

Supplying line wire.

See that a limited supply of main line wire is left at test offices, to be used in case of emergency, and that it is kept in a designated place ready for use. They must see that section foremen also are supplied with line wire and will instruct them as to its use. Immediately after repairing a break in the wires or removing any trouble therefrom, they must report to the chief train dispatcher the locality and cause of same, and render to the superintendent of telegraph a report of same.

Collect material.

See that all unused material is properly stored, and use strict economy in its disposition and at stated times collect all the old copper and zinc, and forward the same as directed.

STATION AGENTS.

Duties.

850. Station agents have charge of the business of the company at the station, and all property connected therewith; also all persons employed thereat, and must see that each perform their duties properly and promptly, and preserve order about the station and grounds.

Absence.

851. They are not allowed to be absent without leave from the superintendent, except

through illness, in which case they must immediately inform the superintendent, and arrange for some competent person to discharge their duties.

852. See that their offices, waiting rooms, freight houses, other station buildings and platforms are kept in a clean and orderly condition; that all grass, straw, or other combustible material is promptly removed from depot grounds and premises; that stock yards are kept in good order and ready for use, that street crossings or side walks are not obstructed, also station platforms and grounds are kept clear of obstructions over which persons may stumble.

Condition of station property.

853. See that cars left at their station have the brakes applied, and are not moved by unauthorized persons or shifted so as to interfere with the safety of trains, and that all switches are properly set and main track switches locked.

Cars at stations.

854. Use every effort to secure the prompt dispatch of cars, have way-bills ready promptly, so that trains will not be delayed. See that empty as well as loaded cars are taken by trains at the earliest possible moment, subject to the order of the chief train dispatcher and car service agent.

Dispatch of cars.

855. Whenever any company material in carloads is received at any station, and for which there is no disposition, report them to superintendent at once by wire, giving contents and any other information they may have, so that it may be arranged to have them unloaded promptly.

Company property.

Loading
freight.

856. Through freight must not be loaded into a car containing freight for way stations, except where it is absolutely necessary.

Loading of
hay, straw,
tow, etc.

857. In loading hay, straw, tow and similar freight that is liable to catch fire, be particular to select tight cars and that all openings are closed and securely fastened.

See that all nails, cleats, blocking, wire, etc., used in loading cars is removed when car is made empty; co-operation of shippers and consignees should be secured.

Platforms.

858. Freight, baggage, trucks, and other articles must not be allowed to stand on the depot platforms where they might cause accident or inconvenience to passengers or employes, or receive damage from the weather. U. S. mail pouches must not be left unprotected upon the platforms or in the waiting rooms and other exposed places at stations.

Cars on
main track.

859. They must not allow a car to stand upon the main track to be loaded or unloaded without special permission, in each case.

Keep cross-
ings clear.

860. See that freight trains do not block public crossings longer than allowed by law or ordinance.

Advertising
matter.

861. Decline to allow any boards, posters or advertising matter to be placed on the company's cars, except such cards as are furnished by the company.

Advertising
matter.

862. Do not permit advertising matter to be posted in or about stations, or other structures

located on the company's property, without proper authority.

863. Keep doors of freight houses closed and securely locked at all times when proper employes are absent, and not permit the delivery of freight except in the presence of themselves or representative. Security of freight.

864. Tickets must not be sold for stations at which trains do not stop, or for trains that do not carry passengers. Tickets.

865. Tickets must not be sold to persons not in condition to care for themselves, unless accompanied by a proper person, nor must tickets be sold for excursion or extra trains unless so authorized. Tickets.

866. Ticket offices must be open at least thirty minutes before the arrival of trains that stop, and kept open until such trains have departed. Ticket office.

867. Station agents, acting as agent for any express or other company, must give preference to the duties of the business pertaining to the railway company. Joint agents.

868. Promptly advise the superintendent, either by wire or mail, of any needed repairs, at their stations, or of any unusual event that occurs in their neighborhood, of general interest or importance, such as fires, disasters, deaths of prominent persons, etc. Unusual events.

869. See that the station is supplied with the necessary lanterns, flags, fusees and torpedoes, and that they are ready for immediate use. Supply of signals.

Platforms
lighted.

870. Unless otherwise instructed, agents will see that lights in waiting rooms and on platforms are kept burning at night. Where no other provision is made, know that all signals are in working order. The keeping of switch and signal lights in good condition is of the utmost importance and agents will see that they are so kept and properly displayed.

Designate
place for
vehicles.

871. Designate the place where automobiles, omnibuses and other vehicles, the drivers thereof and persons representing hotels, may remain while on company's property.

Delivery
U. S. mail.

872. Station agents are responsible for the prompt delivery of United States Mail to and from post offices, also for transfer to and from connecting railroads, when located eighty rods or less from the station.

Mail
on cranes.

873. See that those carrying mail comply with postal regulations and do not hang mail pouches on mail cranes more than ten minutes before the arrival of the train for which they are intended, without reference to the schedule time of trains. Mail delivered from moving trains must be thrown off at a designated place and never on station platforms or at highway crossings. Report all failures in these respects to the superintendent.

YARD MASTERS.

Report to.

890. Yard masters report to and receive their instructions from the superintendent or train master, and will comply with instructions from the chief train dispatcher.

891. They will have charge of the yards Make up trains. located in their territory, of the men employed, the movements of trains and engines, and the distribution of cars therein. That trains are made up and leave at the designated time; that proper slips or waybills accompany each car; that doors of all loaded cars are properly secured and sealed; that doors of all empty cars are closed and secured; that trains are made up in the order designated, that they have the required percentage of air brakes, and all cars equipped with air brakes are placed together first in the train.

892. Keep a record of all trains and cars, note Train record. all irregularities, and see that reports of same are made to the proper officer.

893. Be familiar with the rules for movement Rules for train movement. of trains and other rules, so far as they relate in any way to the proper discharge of the duties of a yard master.

894. See that yards are kept in good order; Operation of yard. that opportunity is given for the proper inspection of cars; that such inspections are made, and that cars requiring repairs are properly placed or sent to the shops as the case may require.

When necessary to move cars in bad order, men doing the work should be notified so that proper care will be exercised in handling them.

895. Report all violations of rules coming Report violations. under their notice, also all cars arriving without proper waybills, and cars of freight received in damaged condition, or improperly loaded.

PASSENGER CONDUCTORS.

Report to. 900. Passenger conductors report to the superintendent or train master. They must obey the orders of the chief train dispatcher, station master and yard master, and conform to instructions issued by authorized officers of other departments.

They will be responsible for the movement, safety, and care of passengers and train, and for the vigilance and conduct of the men employed thereon, and must report in writing any misconduct or neglect of duty. They must see that the speed of their train is properly governed.

Duty. 901. They must report for duty at the appointed time, when necessary, assist in making up train; on arrival at the terminal of the run they must remain in full uniform with their train until all passengers have alighted and will see that all necessary assistance is given them.

**Inspection
of trains.**

902. Know that they have all necessary supplies and signals on hand and ready for immediate use; that train has been inspected, air brakes and air signal tested before leaving terminal, and wherever train or engine is changed; that the couplings, brakes and running gear are in good order; look over the train for anything defective or in bad order, such as windows, ventilators, matting, seats, etc., and report them; also that the prescribed signals are correctly displayed.

They must familiarize themselves with the rules governing the heating, lighting and ventilation of cars and see that they are enforced.

903. Attend courteously to the comfort and wants of passengers and see that trainmen do the same; that passengers are provided with seats; that proper lighting, ventilation and temperature are maintained, and drinking water provided. Courtesy.

In passing through the dining cars the cap will be removed.

Will not allow passengers to ride on the platforms, in the baggage, express or mail cars, or on the engine, or violate in any respect the regulations for their safety. Passengers not allowed.

The doors of all coaches hauled in passenger trains shall be kept unlocked while train is in motion. All toilet room doors must be locked approaching and while standing at important stations and terminals. Doors unlocked.

904. When examining tickets, inform passengers destined to points on branch or connecting lines at what station they will change cars, and of the probable location and leaving time of the train to which they will change, and will notify trainmen regarding the proper discharge of passengers. Passengers informed.

905. It is the duty of conductors to prevent passengers endangering themselves by imprudent exposure; to protect passengers who are lawfully on their trains from rudeness, intoxication, threatened violence, abusive or obscene language; and any passenger acting in a disorderly manner, Imprudent exposure.

or who annoy passengers as stated above, may be removed from the train at the next regular open station, but not elsewhere, whether provided with ticket or not. Use no unnecessary force.

Collect fare. 906. Ascertain that passengers are provided with proper transportation, or collect fare from all those who are not.

Remove from train. If any person should refuse to produce proper transportation, or pay fare, cause the train to be brought to a stop at a regular station, and request such person to leave the train. In case of refusal to do so, remove them therefrom.

It should not be at a station in itself one where by reason of physical conditions, in inclement weather or at such unreasonable hour as might ordinarily endanger the health or safety of the person ejected. It must not be a child, a person of unsound mind, or in such feeble or helpless condition as to be unable to take care of himself or herself at the place of ejection.

Each conductor will be held responsible for the exercise of reasonable discretion in the performance of his duty, maintaining self-control, and being careful to use no unnecessary force that might subject the company to litigation or annoyance.

Name and address. When necessary to eject a person from the train, ascertain, if possible, the name and address of such person, and the names and addresses of a number of passengers who witnessed the removal and report the occurrence to the superintendent and general claim agent on form 992.

907. No gunpowder, dynamite, nitro-glycer- Explosives
ine, gasoline or similar explosive article, shall be
transported in any car attached to a passenger
train.

908. Freight cars of any description, hauled Freight cars
in passenger trains, must be placed next to the train.
engine.

909. When a passenger train has stopped at a Not move
station platform it must not be moved to take train.
coal or water or do other work until the conductor
permits by the usual signal.

Never permit the train to be moved while
passengers are getting on or off.

Care should be exercised in receiving and dis- Receiving
charging passengers to see that they get on or and dis-
off safely, particularly at night or where station charging
platforms are low or do not extend to car steps, passengers.
and so far as possible that they do not get on
or off while train is moving.

910. See that news agents do not mar or News
deface cars in taking on or removing their boxes. agents.
News agents will be allowed only on passenger
trains, and only one upon any train. Each news
agent must be provided with a card or certificate
signed by the manager of the news company,
attesting his employment by that company; and
he must wear the prescribed uniform while on
duty on the train.

He will be under the supervision of the con-
ductor, whose duty it is to see that he conducts
himself properly, and that he conforms to these

rules. In case of misbehavior on the part of any news agent, the conductor must report it to the superintendent.

News agents will load and unload their boxes at the forward part of the train, placing them as directed, and will use no space needed for the comfort of passengers. They will be permitted to pass quietly through the trains, and to offer their wares for sale in a respectful manner.

They may sell on the trains, newspapers, other periodicals, and books of a respectable character; small trinkets, confections, fruits, etc., also cigars and tobacco in the smoking cars. They will not be permitted to sell coffee, ice cream, immoral literature or pictures, nor prize packages of any kind.

They will not be permitted to put their wares in the laps of passengers, nor upon the seats, nor to cry them in a loud voice; but in all ways they must avoid giving offense or causing annoyance. They will not be permitted to play cards or solicit card playing while on trains. News agents will not be permitted to enter parlor or sleeping cars oftener than once each fifty miles, and will not offer their wares for sale unless first addressed. They will not be permitted to enter dining cars during the serving of meals, or to enter sleeping cars after nine pm. Conductors and trainmen will see that all of these rules are fully observed.

Sleeping
cars.

911. See that as little noise as possible is made in and about sleeping cars.

912. All articles left by passengers should be marked to indicate on what date and train they were found and by whom, and left with station master or designated place at division terminal. Articles found.

913. At stations at which trains stop for meals announce in the dining or lunch room notice of departure in ample time to allow passengers to enter the train before it starts. Meals.

914. Only such proper articles, comprising a reasonable amount of legitimate hand baggage, of passengers, as can be conveniently carried with them in passenger cars without inconvenience to other passengers or taking up space in passage ways, will be permitted in passenger cars. Articles that are unwieldy as to size, weight, shape, or otherwise objectionable, or any unreasonable amount of baggage, that should be transported in baggage cars or by express, will not be permitted in passenger cars. Hand baggage.

Dogs, birds, cats or other animals will not be allowed in passenger cars under any circumstances but may be carried in baggage or express cars, where they will be transported under tariff rates and regulations. Dogs, birds, etc.

915. Each coach and baggage car must be supplied with the following tools, and conductors are required to check them over on receiving cars at terminal and junction stations, on taking their train at starting point, and on leaving it at destination, reporting all shortage or damage. Tools.

TOOLS FOR COACHES.

- 1 Axe.
 - 1 Saw.
 - 2 Fire pails.
 - 1 Sledge.
 - 1 Cold chisel.
 - 4 Hand fire extinguishers.
-

TOOLS FOR BAGGAGE CARS.

- 1 Tool box.
- 1 Switch chain.
- 2 Frogs.
- 1 Jack.
- 1 Jack lever.
- 1 Sledge.
- 1 Axe } In case.
- 1 Saw }
- 1-4 $\frac{1}{4}$ x 8" brass } Except in suburban train
- 1-5 $\frac{1}{2}$ x 10" " } service. To be carried in
- 2-5 x 9" " } conductors train box.
- 1 Pail packing.
- 1 Packing iron.
- 1 Packing hook.
- 1 Air brake hose.
- 1 Air signal hose.
- 4 bottles fire extinguishers.
- 1 Stove shaker } In cars equipped with
- 1 Fire shovel } stoves.
- 1 Steam hose.
- 1 Fire pail.
- 1 Stretcher.

1 Cook cooler	{ In dynamo cars and ex- clusive mail and express trains.
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IN WINTER ALSO:

- 2 Scoop shovels.
- 1 or 2 barrels of coal.
- 1 Track shovel.
- 1 Pail of salt.

TRAIN BAGGAGEMEN.

920. Train baggagemen report to the superin- Report to.
tendent or train master. While on duty they are
under the direction of the conductor. At stations
they must obey the orders of the station master.
They must conform with the instructions of the
general baggage agent.

They are responsible for the safety of all Responsi-
bility.
property entrusted to their care.

921. They must report for duty at the ap- On duty.
pointed time, handle baggage carefully, and
remain in the baggage car during the entire trip
except when called upon to perform other duties;
also remain in the car at the end of the trip until
all baggage and other matter is delivered and
receipted for or transferred to a connecting train
baggageman.

Car doors must be securely locked at all times Doors
locked.
when not in use, and no person except those in
performance of duty must enter a baggage car.

922. It is their duty to receive, take care of Not carry.
and correctly deliver baggage carried on the

train; check baggage received at stops where there are no agents, and take up checks for baggage delivered at such points. Keep all checks in possession under lock and key.

U. S. mail. 923. Give proper attention to the custody and delivery of United States Mail and report any irregularities promptly to the superintendent; pay close attention to the custody and delivery of train mail.

Discharging baggage. 924. Baggage men, or others, before discharging any baggage, must be sure that it will clear the train, and that there is no person or object in the way which may be struck by it.

Not carry. 925. Will not carry anything unless it is checked or waybilled, without permission from proper authority.

Hand signals. 926. Have a full supply of hand signals on hand ready for immediate use if called on to do flagging.

PASSENGER TRAINMEN.

Report to. 930. Passenger trainmen report to the superintendent or train master.

When on duty they are under the direction of the conductor. At stations they must obey the orders of the station master or yard master.

They must report for duty at the appointed time, and when necessary assist in making up train.

Duties. 931. It is their duty to attend to the brakes, take care of and properly display train signals at the rear of the train and have all necessary

supplies and signals on hand for immediate use; attend to the lighting, heating and ventilation of all coaches, open and close the vestibule and platform doors and assist the conductor in the proper disposition of the passengers, preventing them from riding on platforms or in any way violating the regulations provided for their safety; to preserve order and in all things requisite for the prompt and safe movement of the train and the comfort of the passengers.

932. Look over the train carefully before starting, and know that all couplings, brakes and running gear are in good order. Inspect train. Inspect the train as often as possible during the trip. See that water coolers are supplied with ice and water, and know that the lamps, whistle signals, air brakes, steam heat and all connections are in good working order. When necessary to avoid delay, assist in handling baggage.

933. Take a position at the car steps to assist Assist passengers. passengers in entering and alighting from the train, ascertain destination of passengers, directing those without tickets to the office.

934. The trainman acting as flagman, must Train protection. consider it his especial duty to protect the rear of the train in accordance with the rules, and allow nothing to interfere with the prompt and efficient discharge of that duty. His position on the train while running is on the rear car. He will obey the signals from the engineman prescribed by the rules; but must never wait for the signal or orders from the conductor when the

train needs protection. When not required to perform other duties at station stops, occupy a position on the ground at the rear end of train.

The front trainman must be prepared to protect the front of the train, whenever necessary; in the absence of the rear trainman he will immediately assume his duties.

Orders.

935. Read all train orders received by the conductor.

Announce
stations.

936. On leaving a station trainmen will announce in each coach in a distinct voice the next station at which the train will stop. If the stop is for meals they will so state, giving the length of time. On approaching a point other than a station where a train is to be stopped, trainmen must announce it by calling in each coach "The next stop is not a station." On approaching a station at which a train stops to discharge passengers, trainmen will announce the station in each coach; on trains equipped with vestibule coaches they will announce the direction passengers will take to leave the train. Junction points and terminals will be announced, passengers notified when to change cars and attention directed to their parcels and other articles.

Seating
passengers.

937. See that passengers are provided with seats. Pass through sleeping cars only when necessary, exercising special care to avoid disturbing the occupants.

In passing through dining cars the cap will be removed.

When not engaged in other duties trainmen will sit near the car door ready to promptly respond to any emergency that may be required.

Positions
on train.

938. On leaving a station they will observe whether there is anyone clinging to the hand rails of the vestibules; if not, they will close vestibule doors and traps, and keep them closed while train is in motion.

Vestibules.

939. They will place a small chain across the opening of the rear platform to the rear car before leaving a terminal, unless it is protected by gates.

Chain on
rear plat-
form.

940. They must watch their train very carefully to discover anything wrong in the matter of journals, brakes, or other defects liable to be dangerous; keep a sharp lookout for all signals from the train and from stations. The rear trainman must ride on the rear platform of the rear car until his train has passed beyond the outer switches, to observe any signals which may be given. On trains containing non-vestibuled coaches, trainman will, on starting from a station and when approaching a station at which stop is to be made, take a position on the coach steps on the side which platform is located and remain there until the entire train has passed the outer end of station platform. On all trains they will closely observe whether any person attempts to get on or off the train while in motion and warn these persons against making such an attempt.

Watch
trains for
defects.

Position
starting
from a
station.

941. Suburban trainmen will distinctly announce in each coach immediately before arrival of the train at Chicago, the following: "Do not forget your parcels."

FREIGHT CONDUCTORS.

Report.

950. Freight conductors report to the superintendent or train master. They must obey the orders of the chief train dispatcher and yard master, and conform to instructions issued by authorized officers of other departments.

Responsibility.

They will be responsible for the movement, safety and proper care of their train, and for the vigilance and conduct of the men employed thereon and must report in writing any misconduct or neglect of duty.

Speed of train.

They must see that the speed of their train is properly governed.

Appointed time.

951. They must report for duty at the appointed time and when necessary assist in making up train.

Supplies and signals and inspection.

952. They must know that all necessary supplies and signals are on hand and ready for immediate use, and that the prescribed signals are correctly displayed; that the train has been inspected before leaving terminal and that couplings, brakes, running boards and running gears are in good order. Particular attention must be given to closing and properly securing car doors to avoid accident. Cars with doors insecurely

attached must not be moved in trains; any neglect by car inspector must be reported to the superintendent at once. Trains must be inspected as opportunity offers during trip, or at points which may be specified in division time tables. Examine all cars to be taken at intermediate stations and if not in safe condition, leave them and report to the chief train dispatcher, giving defects. Attach defect cards to defective cars in their train.

953. On freight trains carrying passengers conductors will see that passengers are seated before the train starts and remain seated until the train stops at the proper places for them to leave the train, and will see that they are given assistance in getting on and leaving the train, and at no time exposed to danger.

Freight
trains carry-
ing passen-
gers.

954. Examine the inside and outside of all waybills for any notations requiring them to set out, weigh cars, etc.

Examine
waybills.

955. Cutting off engine and cars before a train has stopped is prohibited.

Not cut off
engine.

Cars must not be detached from an engine to be run in on side tracks where cars are being loaded or unloaded.

Running switches must not be made with cars loaded with explosives; they must not be made with cars loaded with live stock, when possible to avoid it.

Explosives.

See that there is a thorough understanding with other crews that may be switching at the same station.

Public crossings.

Highway or public crossings must not be obstructed by trains or cars.

Passenger train at station.

956. When meeting or being passed by a passenger train at a station, they will see that their train is opened to allow free passage to and from the station, in addition to opening the street crossings.

Bad order cars.

957. They must not set out cars that are in bad order, if the necessary repairs can be made or they can be safely hauled to the next car repairing station; when hauled back of the caboose they must be chained as well as coupled; they must not be hauled behind a caboose at night.

Waybills.

958. Do not handle cars or freight without proper waybills, or take waybills without the freight or cars; examine all cars forwarded as empty from any station, and be sure they do not contain freight.

Inspection of cars.

959. Call attention of car inspector or station agent in his absence, to any damage which may have been done to cars, which may come to their knowledge, that they may be promptly repaired, and note these in their reports. Cars set out in bad order must be reported at once to the chief train dispatcher, stating number and initials, contents, nature and extent of damage, and note the nature of defect on waybills. Defect card 995 must be attached.

Draft rigging.

960. Draw-bars, brakes, car doors, etc., that may be detached, should be picked up and put into the car they came from, or picked up and

left with the car. If this cannot be done, the location of parts must be reported to the chief train dispatcher.

961. All journal bearings, air hose and coupler knuckles applied by trainmen to foreign cars must be reported on form 963, so that they can be charged to the car owners. Foreign cars.

962. Promptly report to the superintendent any lack of attention on the part of agents, or other persons, whose duty it is to aid in the passage of trains. Report any lack of attention.

963. Chairs will not be permitted in caboose cars except when immovably secured. Chairs.

964. Cars that in their judgment are unsafely loaded, will not be handled in trains and the facts must be reported to the chief train dispatcher. Cars unsafely loaded.

965. When trains separate on account of defective coupling, report the fact to the superintendent, giving date, train and car number, and point at which train parted, also specifying make of coupler and nature of defects. A similar report should be made in person to car inspector or his representative at first terminal. Defective couplings.

966. When engines are hauled in a train, place at least three cars, other than empty flats, between engines. Engines hauled in trains.

967. Except by orders of the superintendent, engines must not be hauled without side rods; when hauled without them the speed of the train must not exceed fifteen miles an hour. Engines without side rods.

Refrigerator
cars.

968. When refrigerator cars are not in train in accordance with refrigerator schedule, notify the chief train dispatcher by wire at once. Examine compartments for ice and know that they contain sufficient ice to carry car to destination. If in need of re-icing notify the chief train dispatcher and agent at the first terminal.

Perishable
property.

969. Cars containing perishable property must have precedence over other freight, and must not be left short of destination, unless for repairs.

970. Cars must not be left on passing tracks without authority of chief train dispatcher.

Position of
conductor.

971. Conductors will station themselves upon the train in the best position possible to enable them to see that their train is intact, that their trainmen properly perform their duties, and know that flagmen go back promptly when necessary to protect the train.

Tools and
supplies.

972. Each caboose car must be supplied with the following tools and supplies, and conductors are required to check them over before starting on a trip, reporting all shortage and damage:

- 1 Axe.
- 1 Saw.
- 1 Broom.
- 1 Chisel.
- 1 Dipper.
- 1 Wash dish.
- 1 Hammer.
- 1 Pail journal packing.
- 1 Packing hook.
- 1 Packing iron.

- 1 Journal box jack and lever.
- 1 Cooler can.
- 2 Frogs.
- 2 Two gallon oil cans, filled.
- 2 Fillers.
- 2 Car chains.
- 1 Coal hod.
- 1 Fire shovel.
- 1 Pound waste.
- 2 Pkgs. wicks.
- 2 Boxes matches.
- 1 Pkg. "Gold Dust" cleaning powder.
- 2 Marker lamps.
- 2 Red flags mounted.
- 2 Green marker flags mounted.
- 1-3 $\frac{3}{4}$ " x 7" car brass.
- 2-4 $\frac{1}{4}$ " x 8" car brasses
- 2-5" x 9" car brasses.
- 2-5 $\frac{1}{2}$ " x 10" car brasses.
- 3 Red lantern globes.
- 6 White lantern globes.
- 6 Lantern frames and burners.
- Torpedoes as instructed by Superintendent.
- Fusees as instructed by Superintendent.
- 2 Air hose.
- 2 Indicator lamps.
- 1 Set indicator stencils.
- 5 Assorted coupler knuckles.
- 1-4 ft. steel bar.
- 1-18" pipe wrench.
- 1 Back-up air pipe.
- 12 Air hose gaskets.
- 1 One gallon water jug.

FREIGHT BRAKEMEN.

Report
for duty.

1000. Freight brakemen report to the superintendent or train master. When on duty they are under the direction of the conductor. They must obey the orders of the yard master. They must report for duty at the appointed time and when necessary assist in making up train.

Inspect
train.

1001. Look over the train carefully before starting, and know that all couplings, brakes, ladders, running boards and running gear are in good order. Inspect the train as often as possible.

Brakes,
signals, etc.

1002. It is their duty to attend to the brakes; take care of and properly display train signals at the rear of the train and have all necessary supplies and signals on hand for immediate use.

Train
orders.

1003. Read all train orders received by the conductor or engineman.

Train
protection.

1004. Rear brakemen must consider it their especial duty to protect the rear of train in accordance with the rules, and must allow nothing to interfere with the prompt and efficient discharge of that duty. Obey the signals of the engineman as prescribed by the rules; never wait for signal or orders from the conductor when train needs protection. Watch the train carefully to see that it has not parted.

Observe
signals.

1005. Front brakemen must be on the lookout at all times for signals, both from the front and rear of train, and watch for indications that train has parted; carefully observe all fixed signals, also persons who may walk across or on the

track and inform the engineman. Their position on trains while running is on the engine, except when rules require them to be on cars.

ENGINE HOUSE FOREMEN.

1020. Engine house foremen have charge of Duties. the engine house and the workmen employed therein. It is their duty to see that the engine house is kept clean and in good order; workmen perform their duties; that supplies are economically used; that engines are prepared for service promptly and are in good working order and properly equipped; that they are inspected, cleaned and reported for repairs when necessary; and that enginemen and firemen are ready for duty at the required time.

1021. When the netting of any engine is Netting of engines. reported by track foreman to be inspected, either by postal card, form 786, or otherwise, it must be promptly done and a report made to the master mechanic and also to the general claim agent on blank form 1592, accompanied by the notification.

ENGINEMEN.

1040. Enginemen report to the master me- Duties. chanic or road foreman of engines. They must obey the orders of the yard master while in yards making lone engine movements and the conductor while in train service unless they endanger safety or require violation of rules or law. When at the engine house they are under the direction of the engine house foreman.

Report.

1041. They will report for duty in accordance with the rules of the terminals; see that the engine is in good working order and furnished with necessary tools, stores and supplies and a full set of signals; assist in switching and making up trains when necessary; examine the bulletin board before starting and at the end of each trip.

Hand
signalling.

1042. Enginemen must have the proper appliances for hand signaling, as prescribed in Rule 99, in the engine cab ready for immediate use. At night, the red lantern must be lighted and placed where it cannot be seen by passing trains.

Imperfect
signals.

1043. Report all switch or other signals not properly lighted or not properly displayed.

Starting
signal.

1044. Enginemen must under no circumstances start from a station without a signal from the conductor.

Keep
look-out.

1045. Keep a vigilant look-out at all times, particularly when passing around curves, through stations and yards, and must frequently look back to see that no portion of the train has become detached or derailed; also for any signals that may be given by trainmen or others. They must not be so occupied as to prevent themselves or firemen from keeping a constant look-out the entire trip.

Riding
on engine.

1046. No one will be allowed to ride on the engine without proper authority, except division officers, signalmen, foremen of bridge and track repairmen on their own sections, or the conductor and brakeman of the train.

1047. Use every precaution to prevent damage by fire from engines. Report all defects in netting, ash pans, etc., at the end of their run. Keep the dampers of ash pans closed while crossing bridges or trestles. Do not permit ash pans to be cleaned over signal connections, switches or frogs, in front of stations, or on crossings. As far as practicable, they should be cleaned at the designated points only. See that ashes are wet down and that they are leveled to the height of the rail.

Fire pre-
caution.

1048. They must not permit any unauthorized person to handle the engine; must not leave it during a trip except in case of necessity, and then in charge of some competent person.

Handling
engine.

1049. Except when absolutely necessary engines must not be left standing within 100 feet of any street or public crossing, upon or under any bridge, nor in the vicinity of waiting rooms, offices, or near cars occupied by passengers.

Engine
near public
crossing.

They will also see that there is no unnecessary escape of steam from cylinder cocks or safety valves or anything that will cause the frightening of horses. Blow off cocks must not be opened in passing through yards or over public crossings, except in case of absolute necessity.

Escape
of steam.

1050. The whistle must not be sounded while passing or being passed by a passenger train, passing an overhead, underneath or public crossing at grade, except in cases of emergency or danger, or when required by the rules.

Whistle.

The first blast of the public crossing whistle 14(l) must be given at the whistling post.

Take coal
and water.

1051. When freight trains of more than twenty cars stop to take coal or water, such stop must be made not less than one hundred feet before reaching the coal shed, water tank or stand pipe, and the engine detached, leaving the air brakes applied.

Tools and
supplies.

1052. Each engine in service is required to carry, at all times, the following tools and supplies, and enginemen must know that they have them and will be held responsible for any loss or deficiency:

- 1-2 lb. cast steel hammer.
- 1-12 inch monkey wrench.
- 1-18 inch monkey wrench.
- 1-18 inch eccentric set screw wrench for eccentric engines.
- 1-8 inch cold chisel.
- 1-18 inch set chisel.
- 1 ash hoe for ash pans with side openings.
- 1 steel coal hammer.
- 1 scoop shovel (also an old one for emergency).
- 1 broom.
- 1 iron water pail.
- 1 packing iron.
- 1 packing hook.
- 1 supply of oak blocking on the small engines.
- 1 assortment of bolts and nuts.
- 1 wrench for crank pin and cross-head pin nuts.
- 2 white flags mounted.

- 2 green flags mounted.
- 1 red flag mounted.
- 6 torpedoes.
- 4 fuses.
- 1 white lantern.
- 1 red lantern.
- 1 engineer's oiler.
- 1-8 pint car oil can.
- 1-8 pint valve oil can.
- 1 set lubricator glasses and gaskets for engines requiring them.
- 1 water glass and gasket.
- 1 torch.

The following may be carried on engines when considered necessary by master mechanic, depending on local requirements and conditions:

- 1 slash bar.
- 1 clinker hook.
- 1 engine truck brass, size to fit engine.
- 2 tank truck brasses, size to fit engine.

FIREMEN.

1060. Firemen report to the master mechanic Report to. or road foreman of engines. When at the engine house they are under the direction of the engine house foreman.

They will report for duty in accordance with the rules of the terminals, and obey the orders of the engineman respecting the proper use of fuel and the manner of performing their work.

Bulletin
boards.

1061. Examine the bulletin board before starting on each trip, and be familiar with all special orders pertaining to their trains or engines. Keep a constant look-out when not engaged in firing and give instant notice to the engineman of any danger signals or obstructions on the track.

Train
orders.

1062. Read all train orders received by the engineman.

Charge
of engine.

1063. Take charge of the engine in the absence of the engineman, and not leave it until his return, nor permit any unauthorized person to be upon it.

Not run
engine.

1064. They must not run an engine in the absence of the engineman without instructions from the master mechanic, unless in some emergency they are instructed to do so by the conductor, or some officer in authority.

Engineman
disabled.

1065. In case the engineman becomes disabled, the fireman must stop the train and report to the conductor.

AIR BRAKE & TRAIN AIR SIGNAL INSTRUCTIONS.

Successful
working.

1070. As safety depends on the successful working of the air brake, it is of the utmost importance that all its parts be in perfect working order, and that employes having anything to do with the brake be perfectly familiar with its manner of operation.

Attend
school of
instruction.

All such employes will be required to attend the school of instruction held in the company's air-brake instruction car.

1071. The following rules cover only the general operation of air brakes and will be changed by special instructions when required.

1072. Cars in passenger trains must be equipped with air brakes and air signals, which must be coupled and connected with the engine.

1073. A passenger train must not leave a terminal or division point with brakes on any car cut out, or in defective condition, without permission of the proper officer.

1074. At least the percentage required by law, as shown on division time tables, of the total number of cars in freight trains, must be equipped with air brakes which must be coupled, connected with the engine and operated, and all air brake cars which are associated together with such percentage, shall have their air brakes connected and operated.

1075. In passenger service one sufficient reduction of brake pipe pressure must be made within 1000 feet from starting point at terminals or points where brake pipe connections have been separated, to assure that all brakes are operating properly.

1076. Enginemen taking engines must see that the air brake apparatus on the engine and tender is in a safe and suitable condition for service; that the air pump and lubricator work properly; that the regulator prevents the brake-pipe pressure from varying from the authorized pressure; that an excess pressure of not less than twenty pounds can be maintained in the main

reservoir when the handle of the engineman's brake valve is placed in the running position and that the brake valve works properly in all positions of the handle; that the water has been drained from the air brake system and that when the brakes are fully applied the piston travel on engine and tender do not exceed the following limits:

Cam type driver wheel brake.....	2" to 3½"
Other type of driver wheel brakes ...	4" to 6 "
Engine truck brakes.....	6" to 8 "
Tender brake.....	6" to 9 "

Independent
brake test.

They must also test the independent brake and the air signal on engines so equipped, the latter by making a slight opening in the stop-cock of the signal train line and noting proper whistle response.

How to
work air
pump.

1077. Start air pump slowly to work condensation out of steam cylinder, then apply a few drops of cylinder oil through the steam lubricator to the steam cylinder. To supply air to the train the pump should be run at a medium speed, but not fast enough to cause excessive heating. If the air cylinder needs oil, use sparingly through the oil cup on top of air cylinder a small quantity of valve oil, but never through the air valves. Keep a good swab on the piston rod.

Inspect
signal
equipment.

1078. Enginemen must thoroughly inspect the air brake and signal equipment and report on proper form to round house foreman at end of run or day's work, any defect they may find.

1079. The brake pipe under the tender must be blown out thoroughly before connecting to the train. There should be full maximum main reservoir pressure on the engine when making this connection. When the train has been charged to the authorized brake pipe pressure, the engineman shall, at a signal from the inspector or trainmen, apply the brakes with full service application of not less than twenty-five pounds reduction, and leave them so applied until the brakes on the entire train have been inspected and release signal given. He shall then release the brakes, and not start the train until inspector or trainman informs him all brakes are released and their general condition; also the location of loaded and empty cars. This test must be made after each change in the make up of the train.

Blow out
brake pipe
under tender.

When a train is to be handled by a back-up hose, enginemen must observe the reduction made by the train men in making a test, as indicated by the air gauge.

Back
up hose.

1080. Passenger trains running at a high rate of speed must be stopped with two applications of the brakes, except trains equipped for graduated release. A sufficient application should be made while the speed is high to bring the train under perfect control, and after releasing, a second light application should be made to complete the stop.

High speed
passenger
trains.

On passenger trains of nine cars or less, release the brake shortly before stopping, except on heavy

or moderate down grades, where after releasing, apply the brakes lightly to prevent the train starting. When over nine cars, hold the brakes lightly applied until the train stops, to prevent the train parting. A second engine will be counted the same as two cars.

Freight
train
brakes.

1081. With freight trains first allow slack to run up against the engine. Great care must then be taken to apply the brakes with the proper reduction, according to the speed and length of train, and not make a second reduction until the effect of the first is felt on the entire train, in order or prevent shocks.

Slow speed.

Do not release the brakes on freight trains at slow speed, but preferably bring the train to a full stop.

Releasing
brakes.

1082. To release brakes move handle of engineman's valve to full release and return it to running position. Good judgment should be used by leaving the handle in full release longer for a long train than for a short train, always returning the handle to running position soon enough to allow the brake pressure to reduce below the authorized pressure before auxiliaries overcharge.

Second
release.

On long trains, after returning the handle to running position, leave it there a few seconds, then make a second light release to insure the release of the forward brakes that usually re-apply.

Emergency
application.

1083. Emergency application of brakes must not be used except in actual emergencies.

1084. If the brake be found dragging at any time without a rapid fall of the black pointer, move the handle of the engineman's valve into full release position for a second, and then return it to the running position. If the brake will not respond, apply the brake and then release. If, however, the brakes go on suddenly, except when backing with back-up hose, with a fall of the black pointer, it is evident that (a) a conductor's valve has been opened, (b) a hose has burst or other serious leak has occurred, or (c) the train has parted. In such event, place the handle immediately on "lap" position, to prevent the escape of air from the main reservoir, and leave it "lapped" until defect has been remedied and release signal given.

Defective
brakes.

1085. The engine and tender brakes, unless defective, must be used automatically at every application of train brakes. When a brake is defective so that it should not be operated, the particular brake defective should be cut out.

Engine
brakes.

1086. When two or more engines are coupled together in one train, brakes must be connected through to and operated from the head engine. For this purpose a cut-out cock is placed in the brake pipe just below the engineman's valve. The engineman of each engine except the head one, must close this cut-out cock and place the handle of his valve in the running position, keep air pump running, maintaining air pressure on his engine, thus enabling him to assume charge of the train brakes should occasion require.

Double
headers.

Air pump
failing
to work.

1087. If air pump stops it can often be started by closing the throttle and opening it quickly. If an air pump stops frequently take off the cap and apply a little cylinder oil. If this does not start the pump remove the reversing piston (side cap) and see if the packing rings are broken; if so, remove the broken pieces, wrap with candle wicking, oil and restart pump. Occasionally the nuts come off the main piston rod in the air cylinder, or the reversing plate bolts get loose in the steam cylinder; this may also cause the pump to stop. Generally time permits of only the first few things being done. Notify the conductor immediately if the air pump will not work so the train can be controlled by the hand brakes to a place where decision will be made as to whether you shall proceed with the train.

Brake valve
deranged.

1088. If brake valve be so deranged that the equalizing reservoir leaks badly, is broken off, or the equalizing piston sticks up and will not seat, place a blind gasket in the connection to the engineman's brake valve leading to the equalizing reservoir or plug up the opening; put a plug in the train line exhaust elbow; and do your braking with the emergency position carefully to avoid jerking.

Coupling to
train on
picking up
cars.

1089. When coupling to train or taking extra cars, apply brakes on cars already coupled to the engine, leave the handle in lap position until the cocks are open, then release all brakes and charge the train.

1090. In descending grades apply brake Descending grades. lightly before speed increases very much; keep speed low and the brake pipe and auxiliary pressures as high as possible, taking advantage of let-ups and curves to recharge. When recharging on a grade place the handle in full release until the auxiliaries have time to recharge to the authorized pressure.

1091. When backing passenger trains and back-up hose is to be used by trainmen, the Backing passenger trains. engineman must carry the brake valve in running position. Following either a stop or slow down, and signal is given to continue backing, the handle of the brake valve should be moved as in making a regular brake release.

On grades where a train will not stand with On grades. brakes released, the train should be held with the straight air brakes of the engine, or, in its absence, by admitting steam to the cylinders with the engine reversed.

The engineman must apply the automatic Automatic brake. brake whenever in his judgment it is required to insure the safety of the train.

1092. In Passenger Service: When trains are Passenger trains approaching terminal. approaching a terminal station, end of double track, junction point, railway crossing at grade, draw bridge, heavy descending grade, or any point of possible danger, engineman shall make a two mile limit air brake test consisting of an eight to ten pound reduction of air pressure, and judging the resultant holding power of the

brakes, as well as observing the length of blow from the brake-pipe exhaust of the automatic brake valve.

**Freight
service.**

In Freight Service: Enginemen must know that the required pressure, which will be indicated by the air gauge, is maintained at all times. Conductors must give such observance to the air pressure, indicated by the air gauge located in the caboose, as will insure against the possibility of a closed angle cock, or insufficient pressure from any cause, and must continuously observe the air gauge while descending heavy grades, or places of extra hazard. Should the air pressure as indicated by the air gauge in the caboose indicate possible danger, the conductor must take precautionary measures to insure safety by information conveyed to the engineman, the application of air brakes by the conductor's valves, or by hand brakes, as may be necessary.

**Non air
cars.**

When a car not equipped with air brakes or brake pipe broken is hauled in a freight train ahead of caboose, the conductor must so inform the engineman, who will then be required to make a two mile limit air brake test approaching a station, end of double track, junction point, railway crossing at grade, draw bridge, heavy descending grade, or any point of possible danger, by applying the brakes with sufficient reduction of air to assure himself of their holding power and that he has proper control of the train; this will be done without reliance upon the exhaust from the automatic brake valve. If not assured

he has power control, and the speed and length of the train renders it unsafe to release brakes, he will hold them applied until the train stops.

1093. When engine has been coupled to train, Testing air. or two sections have been coupled together, the brake and signal couplings must be united, the angle cocks in the pipes—both brake and signal—must be open, except those at the rear end of the last car, which must be closed. After the train has been charged with air, signal must be given to apply the brakes, as provided for in the train rules. When this has been done brakes on each car must be examined to see if they are properly applied. When it is ascertained that each brake is applied the engineman must be signaled to release the brakes. When the train air signal is in use the signal to the engineman to apply the brakes should be given from a car as near the forward end of the train as possible and to release brakes from the rear car; both by use of the air signal. The brakes of each car must then be examined to see that each is released.

In addition, when a train is to be handled with Back up hose. a back-up hose, trainmen must make a test with the back-up hose.

1094. If defect be discovered it must be Air defects. remedied and brakes tested again—the operation being repeated until it is ascertained that everything is right. The engineman must then be notified that the brakes are working properly.

Detaching
engine.

1095. When detaching engine or cars first close the cocks in the brake pipes at the point of separation, and then part the couplings invariably by hand.

Frozen
couplings.

1096. If couplings are found frozen together or covered with an accumulation of ice, the ice must first be removed and then the coupling thawed out to prevent injury to the gaskets.

Brakes
sticking.
Wheels
sliding.

1097. If brakes stick or wheels slide, engine-man must be signaled as per rule 16 (*m*). If engineman cannot release brakes, or if brakes are applied to detached cars, the release may be effected by opening the bleed cock in the auxiliary reservoir until the air begins to release through the triple valve, with the LN brake until the brake is entirely released, when the reservoir cock must be immediately closed. Brakes not releasing might be caused by the brake not being cut in at angle cock, or retainer turned up.

Break
in two.

1098. Should a train break in two or more parts, first close the angle cock at the rear of the first section and signal the engineman to release the brakes. Having coupled to the second section, observe the rule for making up trains—first being sure that the angle cock at the rear of the second section has been closed, if the train has been broken into more than two sections. When the engineman has released the brakes on the second section, the same method must be employed with reference to the third section, and so on. When the train has been recoupled brakes must be inspected and each released before proceeding.

1099. If, through defect of brake apparatus Cut out car. while on the road, it becomes necessary to cut out the brake upon any car, it may be done by closing the cock in the cross-over pipe near the center of the car where the quick-acting brake is used. When the brake has thus been cut out, the cock in the auxiliary reservoir must be opened and left open upon passenger cars, or held open until all air has escaped from the reservoir upon freight cars. The brake must never be cut out upon any car unless the apparatus is defective, and when it is necessary to cut out a brake, the conductor must notify the engineman and also report, stating the reason.

1100. Should it be necessary to apply brakes Conductor's valve. from the train, it may be done by opening conductor's valve. The valve must be held open until the train comes to a full stop, and then must be closed. This method of stopping the train must not be used except in case of emergency.

1101. If a brake pipe hose should burst, it Air pipe burst. must be replaced and the brakes tested before proceeding, providing the train is in a safe place. If it is not, the cock immediately in front of the burst hose must be closed, and the engineman signaled to release. All the brakes to the rear of the burst hose must be released by hand, and the train proceed to a safe place where the burst hose must be replaced and brakes again connected and tested as in making up train.

Retaining
valves.

1102. When the pressure-retaining valve is to be used, the trainmen must, at the top of the grade, test the brakes upon the whole train, and must then pass over the train and turn the handle of the pressure-retaining valves horizontally upon all or part of the cars, as may be directed. At the foot of the grade the handles must all be turned down again. Special instructions will be issued as to the grades upon which these valves are to be used.

Discharge
valves.

1103. In making up trains, couplings and car discharge valves on the cars must be examined to see all are tight. Should the car discharge valve upon any car be found defective while on the road, it may be cut out of use upon that car by closing the cock in the branch pipe leading to the valve. The conductor must be notified when the signal has been cut out upon any car, and he must report the same for repairs. In using the signal, pull directly down upon the cord during one full second, for each intended blast of the signal whistle, and allow two seconds, or more on long trains, to elapse between the pulls.

Report to
inspector.

1104. Any defect in air brake or air signal apparatus discovered upon the road must be reported to the inspector at the end of the run, or, if the defect be a serious one in passenger service, it must be reported to the nearest inspector, and be remedied before the car is again placed in service.

Air brake
cars ahead.

1105. When making up trains at terminals, all air brake cars should be switched ahead and

operated. While passenger trains are charging, brakeman or inspector must pull each car discharge valve to see that air signal is cut in on each car. When switching passenger cars occupied by passengers or adding to passenger trains the air brake must be coupled up and used on cars being handled; this is to insure safety, also it charges auxiliaries, and brakes can be tested immediately.

1106. A back-up hose must be used for back-^{Back up hose.}ing all passenger trains, whether loaded or empty, and one or more experienced trainmen must be on the rear platform of rear car.

All back-up hose must have a valve with a $\frac{3}{4}$ -inch minimum opening, and a warning whistle.

When back-up hose is to be used, its connections ^{Reduction test.} must be tested by making through its valve a reduction of brake-pipe pressure before the train is moved and the engineman will require this test before backing train; also a running test must be made by use of the valve in the back-up hose within 200 feet after train has started back, bringing the train to a stop against the working of the engine and if this is not done the engineman will stop the train within 300 feet of starting point.

The engineman will require the above tests to be made before proceeding.

When making a stop with the back-up hose, ^{Make test.} the opening of the valve should be gradually increased until the train has slowed down as much as desired or has stopped, if required.

Avoid
emergency
application.

The valve in back-up hose should be opened slowly to avoid the emergency application, except in case of emergency, when it must be quickly opened wide and left open. When this valve is closed the brakes will release and re-charge from the engine.

Defect
cards.

1107. Trainmen must keep on hand several air brake defect cards, and when they find an air brake or air signal inoperative and it cannot be repaired immediately, they shall apply a card, according to instructions. Car repairers and inspectors will immediately proceed to put it in proper repair and detach card when found to be in good working order. Conductors will be held responsible for leaving trains at destination terminals with air cut out and no defect card.

When
to cut
in air.

1108. When picking up air brake cars, cut in air when making draw-bar coupling; before opening angle cock see that rear cock is closed. The cars will be charging while going back to trains. Before moving cars on the side track or starting from terminal, care should be exercised to see that hand brakes are off, shoes not frozen to wheels, and retainers down.

LN brakes.

1109. When passenger trains equipped with LN brakes are to be switched, or when road engines are to be changed, the engineman will make a twenty pound reduction of brake pipe pressure and leave the brakes applied, before the angle cock between train and engine tank are closed. This to permit the engineman of the receiving engine to release the brakes and avoid

delay caused by brakes sticking. Trainmen and yardmen will not close angle cocks for the purpose of changing engines until engineman has made this reduction.

1110. Hand brakes should be set at rear end of train only when backing up to keep slack from running out, or upon a call for brakes. When setting out air brake cars bleed the auxiliary reservoir before setting up hand brakes.

1111. It is the duty of enginehouse foremen to see that air brake and signal equipment is properly inspected upon each engine. It must be ascertained that all pipe joints, connections and all other parts of the apparatus are air tight, and in good working order, cleaned and lubricated at proper intervals and pressure regulators adjusted to the authorized pressure.

1112. Air pumps must be tested under pressure, and if found to be working imperfectly in any respect, must be put in a thoroughly serviceable condition.

1113. Driver and tender brakes must be so adjusted that the piston travel will be within the following limits:

Cam type driver wheel brake.....2" to 3½"

Other forms of driver wheel brake...4" to 6"

Engine truck brake.....6" to 8"

Tender brake.....6" to 9"

When the cam brake is used, care must be taken to adjust both cams alike so that the point of contact of the cams will be in line with the piston rod.

Tender
brake.

The tender brake must be adjusted by means of the dead truck levers or bottom rods, corresponding levers on the two trucks have a like angle and that the travel does not exceed the long and short limits.

Drain
reservoir.

1114. The main reservoir, and also drain cup in brake pipe under tender, must be drained of any accumulation after each trip. The auxiliary reservoirs and triple valves must also be drained frequently, and daily in cold weather, and the brake pipe under the engine and tender blown out.

Air signal
tested.

1115. The air signal apparatus must be examined and tested by suitable appliances from both front of the engine and rear of tender, to know that the whistle responds properly.

Couplings,
etc., in
good order.

1116. It is the duty of all inspectors to see that couplings, pipe joints, triple valves, conductor's valves, air signal valve, and all other parts of the brake and signal apparatus are in good order and free from leaks. For this purpose they must be tested under the full air pressure as used in service. No passenger train must be allowed to leave a terminal station with the brake upon any car cut out, or in defective condition, without special orders from the proper officer. If a defect be discovered in the brake apparatus of a freight car, which cannot be held long enough to give time to correct such defect, the brake must be cut out and the car properly carded, to call the attention of the next inspector to the repairs required.

1117. Freight trains on arrival at terminals where inspectors are stationed to make immediate brake inspection and repairs, shall have slack stretched and left with brakes fully applied. Slack stretched for inspection.

1118. In making up trains, couplings must be united and cocks at ends of cars all opened, except at the rear end of the last car, where the cocks must be closed; the inspector or trainman must know that the air is passing through the pipes to the rear end. After the train is fully charged, the engineman must be signaled to apply the brake. When the brakes have been applied, they must be examined upon each car to see that they are applied with proper piston travel. This having been ascertained, the inspector or trainman must signal the engineman to release brakes, using the train air signal from the rear car discharge valve, upon passenger train. He must then again examine the brakes upon each car to note that each is released. If any defect be discovered, it must be corrected and the testing of the brakes repeated until they work properly. He must then inform both the engineman and the conductor of the number of cars with brakes in good order. This examination must be repeated if any change be made in the make up of the train before starting. Train air signal.

1119. Inspectors will be held strictly responsible for the good condition of all brake and signal apparatus upon cars placed in trains. They will also make any examination of brake apparatus or repairs to the same, which they may be called upon to do by train men. Inspectors responsible.

GENERAL MAINTENANCE RULES.

Location.

1140. Foremen, maintainers and repairmen in bridge, track, signal, telegraph and telephone work must keep their headquarters advised of their location and respond promptly when called.

Co-operation.

1141. Employes in the several branches of work will at all times co-operate, and when necessary, assist each other in maintenance work.

Duties.

1142. They will have charge of men directly under them; examine and know that they understand and obey the rules and understand and know the meaning of signals; see that material and tools are safely kept and properly used; keep record of time worked and material used, and will make such detailed distribution of labor and material as may be required. When watchmen are employed, they must properly instruct them in relation to their duties and know that they are complied with.

Time table and watch.

1143. Keep themselves supplied with a copy of current Time Tables, and be thoroughly familiar with all the rules and regulations thereon, and with the time of all trains over the section of road on which they are working; carefully note signals carried by trains; no notice will be given of extra trains that may be running. They must provide themselves with a reliable watch and when possible compare time daily with a standard clock or with watches of employes who are required to have correct time.

1144. Foremen in bridge and track work ^{Hand signaling.} must keep themselves supplied with the following signals, and in proper condition ready for immediate use:

- 12 torpedoes,
- 6 fusees,
- 3 red flags,
- 2 green flags,
- 3 combination red and green flags,
- 4 green lanterns,
- 3 red lanterns,
- 2 white lanterns.

1145. Foremen, maintainers and repairmen in ^{Hand Signaling.} signal, telegraph and telephone work must keep themselves and each man under them, who may be called upon to do flagging, supplied with the following signals and in proper condition for immediate use:

- 12 torpedoes,
- 6 fusees,
- 1 red flag,
- 1 red lantern,
- 1 white lantern.

1146. Before work on track, bridge or culvert is commenced which will render it impassable for trains, the train dispatcher must be notified if possible; flagman must be sent in both directions with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fusees, and will remain there until recalled. ^{Work on bridges, culverts and track.}

When day signals cannot be plainly seen, owing to weather or other conditions, night signals must also be used.

Placing
torpedoes.

In placing torpedoes they will be securely fastened to the top of the rail on the engineman's side, two hundred feet apart, and, when practicable, not closer than five hundred feet from a whistling post.

Flagman's Signals:

Day signals—A red flag,
Torpedoes and
Fusees.

Night signals—A red light,
A white light,
Torpedoes and
Fusees.

Slow
signals.

1147. When track is in bad order or work is to be done which will render it unsafe for trains to pass at their usual speed, a combination red and green flag by day, and in addition a red and a green light by night, must be placed a sufficient distance to insure full protection.

Resume
speed
signals.

A green flag by day, and in addition a green light by night, will also be placed at the point where normal speed may be resumed.

Location of
signals.

On single track these signals must be placed to the right of the track, and on double track to the left of the track in the direction of current of traffic; these signals will not be placed within the home signal limits or near the interlocking home signal in the direction of current of traffic.

When slow speed is to be maintained at the same point more than one week, standard slow boards should be set up instead of the flags, and standard signal lamps used instead of lanterns. Slow speed signals must be set on two standards at least four feet high.

Standard
slow boards.

Report to the proper officer at once, every instance when signals have been disregarded.

Signals
disregarded.

1148. Employes in the bridge and building, water service, track, signal, telegraph, or other departments having occasion to obstruct a main track in any way while engaged in doing necessary work, must, before doing so, see that protection is given as per Rule 99.

Protect
trains.

1149. They shall be responsible for the proper installation, maintenance and safe condition of the work under their charge, for the economical use of material and for all tools entrusted to their charge, and when tools are not in use they must be locked up in the tool car or box. When relieved they must turn over to their successor all such tools and material.

Responsi-
bilities.

1150. No material of any description must be piled or left within six feet of main or side track, or elsewhere, in such a manner as to obstruct the view of or from approaching trains. Rails and other material must not be left scattered about the station grounds. Old ties, fencing, draw bars, spikes, iron work, car doors, scraps of all kinds found, must at once be picked up and disposed of as directed.

Piling
material.

Changes
affecting
automatic
signals.

1151. They must not make any change in the tracks which will interfere with the automatic signals without previous arrangement, nor make any iron connections of the rails and frogs. They must observe the working of the automatic signals and report promptly any defects noticed.

Broken
rails.

When a rail is broken in track which is bonded for track circuit, also when bond wires or signal connections are found broken, or it is necessary to break them, the signal repairmen must be notified immediately so that normal conditions can be restored as soon as possible.

Accidents.

1152. In cases of accident to trains, storms, or other causes which may prevent the movement of trains, they will render all possible assistance in restoring normal conditions, whether coming under their particular duties or otherwise, and co-operate with other departments in the protection of the company's property.

Investigate
accidents.

1153. They shall investigate and report all accidents which may be attributed to defects in, or result in damage to, property under their charge.

Prescribed
standards.

1154. They shall conform to the prescribed standards and plans in the execution of their work. They will not permit, except by proper authority, experimental trials of appliances or devices nor give out information of the result of any trial.

Authority
for
permanent
changes.

1155. They must not make or permit any permanent rearrangement of or changes in bridges,

building, track, signals, interlocking plants, telegraph or telephones without proper authority.

1156. Track jacks, when in use, must be placed on the outside of the rail, and must always be protected as per Rule 1145, when track is obstructed. The use of track jacks between the rails, or permitting them to stand on the track or lie between the rails when not in use, is positively forbidden. Tools, iron, ties and other material should not be brought on the track and allowed to remain there, except when needed for immediate use.

Track
jacks,
tools, etc.

1157. They must not permit switch keys to pass out of their possession, and must personally attend to the opening and closing of switches equipped with locks.

Switch keys.

1158. (a). Track cars must be used only in company service. No persons other than employes in discharge of their duties will be permitted to ride upon or use such cars except in connection with railway service and then only by permission of the company employe in responsible charge of the car.

Track cars.

(b). When track cars are used, lookout must be maintained in both directions.

(c). Track cars moving in the same direction on one track must be kept at least five hundred (500) feet apart, must not be attached to and must not follow a moving train closer than five hundred (500) feet.

(d). Should a torpedo be exploded by a track car, the torpedo must be immediately replaced.

(e). Hand cars operated in multiple main track districts must in all cases be moved against the current of traffic when view is not obstructed.

(f). When a track car is run after dark, a white light must be displayed to the front and a red light to the rear of the car.

(g). A track car must not be used on the main track when view is not clear on account of fog or other weather conditions unless properly protected. It must not be taken from the track at public or private crossings, except in emergency.

(h). Track cars must not be run by a train standing at a station except where there is a fence between tracks.

(i). Motor track cars must not be run by station platforms where view is obstructed, past men working on track or after dark when rails cannot be seen for at least two hundred (200) feet, faster than will allow a car to be stopped in fifteen (15) feet.

(j). When approaching a highway, the view of which is not perfectly clear, the speed of a track car must be regulated, and if necessary the car stopped before reaching the crossing, so that if a team or automobile reaches the crossing at the same time, an accident cannot occur. The man operating the car is responsible and should not accept hand signals from crossing flagman or any one else stationed at or near the crossing, but should have absolute knowledge that the crossing is clear.

(k). Track cars must not be left standing on main track except in charge of a sufficient number of men to properly handle them. When not in use, they shall be removed from track and locked or otherwise secured.

(l). A person operating a track car will be held responsible for all accidents and must protect himself and others against accidents. He must not expect others to protect themselves.

(m). Take no risks. In case of doubt, adopt the safe course. It is better to be delayed than have an accident.

(n). Any employe who notices the unauthorized use of a track car will immediately report same to the Division Superintendent.

(o). The laws or regulations of a state or municipality within which a track car is being operated must be observed.

1159. (a). Each motor car should be operated by one person as much as practical, who should be thoroughly familiar with the car.

(b). The person in charge of a car must know that all tools and materials on a car are safely secured and kept in that condition.

(c). Before starting, there should be a thorough understanding as to what part each person is to take in handling the car should an emergency arise necessitating prompt handling of the car.

(d). A motor car must never be operated under its own power, unless person running the car is

on the car. Before applying power, whether starting or running, spark lever must be in the retard position.

(e). A speeder motor car must not be run backwards under its own power.

(f). Keep a constant lookout for dogs, chickens, hogs, or other animals, also for objects such as stones and sticks on rail, which are liable to be struck and derail car.

(g). A track car must be stopped and persons using car must step off of tracks when a moving train is passing on adjacent main track.

(h). Cars should not be operated faster than a walk through interlocking plants or over facing switches and facing frogs, and should be run carefully over trailing switches.

(i). A track car must not be run to exceed ten (10) miles per hour on curves, or more than twenty (20) miles per hour at any time.

(j). When rails are slippery due to wet weather or frost, a greater distance is required to stop a track car and the person operating the car should take this into account.

(k). A motor track car must never be used to push another car. When used to move another car, the motor track car must always be ahead and securely attached close to the car being towed. Slow speed must be maintained. No one shall be allowed to sit with legs between such cars when in motion.

(l). Do not adjust track car while it is in motion except that adjustment of carburetor is permitted.

(m). Each gang hand car must be provided with a hand lever attached to brake on at least two wheels. Immediately after starting a track car, brakes must be tested to insure that they are in proper working condition. Do not use brakes suddenly without warning to every one on car.

(n). All persons riding on gang hand cars must be in standing position.

(o). Before using track car each day, inspect all bolts, nuts and cotters to see that all are tight, that gasoline tank, feed pipes and connections do not leak and that brakes are in good condition and adjustment. Excessive side play in boxes must not be allowed. Each box must be held by two bolts with nuts and nutlocks. On speeder cars there must be two bolts, with nuts and nutlocks fastening guide wheel axle to guide arm. Gauge of wheels must not be over four feet eight inches (4' 8") or less than four feet seven and one half inches (4' 7½"). Track cars must not be used with any part worn or broken which is liable to cause an accident.

(p). All speeder motor cars must be equipped with four (4) wheels; the large wheels must have concave tread. Each large wheel must be provided with a brake and both operated by one lever; the brake lever handle must be provided

with a hook or secure means to insure brake lever clearing moving parts of engine four (4) inches.

In lining up wheels of speeder motor cars, front large wheel should be very slightly turned towards right hand rail (except on those cars on which no adjustment is provided); rear large wheel very slightly away from right-hand rail; front small wheel away from left-hand rail and rear small wheel parallel to rail. When lined up properly, large front wheel will hug right-hand rail when car is pushed forward by hand, and if car is shoved over so that small wheel hugs left-hand rail, the car will return itself so that large front wheel hugs right-hand rail. See that large front wheel hugs rail before starting.

(q). The use of a track car with any other motor and equipment than that regularly installed thereon will not be permitted without special authority.

(r). Gasoline must not be handled near a lighted lantern or any other flame.

(s). Do not get off car while it is in motion. In no case shall a man get on a car that is in motion from in front.

(t). Track cars must be shipped on trains as little as possible. The tanks must be thoroughly drained before loading for shipment.

TRACK FOREMEN.

1180. The track foremen report to the Report to.
road-master.

They have charge of the repairs on their section, Responsi-
and are responsible for the maintenance and safe bility.
condition of the track.

1181. They must assist in the work personally; Duties.
go themselves, or send a reliable and competent
man, over their sections at least once daily;
carefully note the condition of track, road-bed,
bridges, culverts, fences, cattle guards, etc.,
and know that everything is safe for the passage
of trains.

1182. See that track is in proper line and Proper line.
surface, is full spiked to correct gauge, and that
every joint is full bolted and kept tight.

1183. They must see that all switches are in Switches,
perfect order; that frogs, guard-rails and switch- frogs, guard
rails are properly blocked and spaces in planked rails, etc.
crossings kept clean; that switches, derails and
pipe lines in interlocking plants are kept clean and
well drained; that derails and signals connected
to and protecting outlying switches are working
properly.

1184. They must see that the right-of-way Cattle
fences and cattle-guards are kept in repair, and guards.
that gates and bars are closed. In any case where

parties are in the habit of leaving gates and bars open, notice of the fact must be given the roadmaster.

Fires.

1185. Keep a careful look-out for fires along the right-of-way, and, if possible, prevent its spreading, and damage or destruction of the Company's or adjoining property. During dry weather no fires must be started unless there is sufficient force to keep them under control. When a fire is discovered which appears to have been started by an engine, a report should be immediately made to the nearest master mechanic, or round-house foreman, by wire and on postal-card form 786. In every case of damage, either to the Company's property or the property of others, a report must be made to the roadmaster on form 76. If property destroyed does not belong to the Company, the owner should be requested to make a statement of loss on form 76-A, which must also be forwarded to the roadmaster.

**Live stock
and dis-
position.**

1186. Investigate every case of damage to live stock and make a full report to the roadmaster on form 1229. When stock is killed or injured notify the owner, and if not taken charge of within a reasonable time, bury the carcass and dispose of the hide to the best advantage; notify the owner of the action taken, sending the required reports promptly to the roadmaster, and the money to the local treasurer.

Track foremen are prohibited from arbitrating or agreeing on appraisers to determine the amount of the loss.

1187. Whenever violent wind or rainstorms occur, or in case of sudden rise of streams at night as well as during the day; trackmen are required to carefully examine the condition of the track, bridges, culverts, etc., and if not considered entirely safe, flag approaching trains. A report must always be made to the chief train dispatcher by wire after such inspection, stating the exact conditions.

Wind,
rainstorm,
high water.

1188. Examine the line wires each day and if they are crossed or obstructed, repair temporarily, when possible, and report the conditions to the chief train dispatcher. Examine each day the whips and warning guards for overhead structures, repair when possible, and report defects to the road master.

Examine
wires.

1189. They will pick up any property found on the right-of-way, whether lost from passing trains or not, and deliver it to the agent at the nearest station, making a report by letter to the road master.

Care of
property.

1190. Should persons be found on the right-of-way who are not in a safe or proper condition to care for themselves, they must be placed in charge of the proper authorities or removed to a place of safety from personal injury.

Persons
unable to
care for
themselves.

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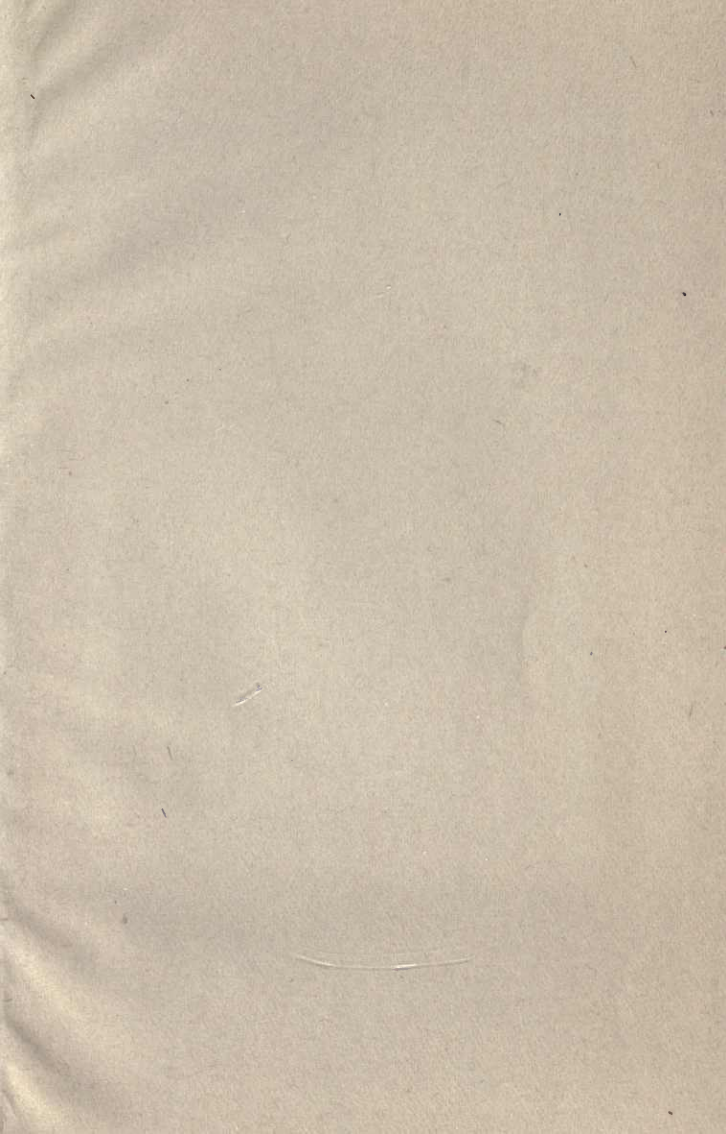
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